APPENDIX D

HISTORICAL AND CURRENT MATERIAL SAFETY DATA SHEETS

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APR 07 1992
RCOM SECTION

Description of Process Knowledge
(Paragraph 57(a)

Re: In the Matter of Knapheide Manufacturing Co., West Quincy, Missouri, EPA Docket No. VII-H-0008

As indicated in Compliance Order Paragraph 57(a), there are numerous process lines at the facility. The description of processes which generate or potentially generate hazardous waste is provided below. Several unique wastestreams may be generated along any process line. Wastestreams which are similar in appearance from the same process line or different process lines may have significant differences in waste characterization. For instance, absorbent materials (paint filter and overspray paper) in individual paint booths may generate characteristically different waste streams due to type of paint used within each booth, the duration of painting operation within each booth between changing of absorbent materials, the handling of used absorbent material, etc.

The following manufacturing finish processes generate waste absorbent material (paint filters and overspray paper) or listed hazardous waste. Absorbent material waste is currently handled as a single waste stream, although the characteristics of the waste varies between individual paint booths. Delineation of the separate wastestreams which may vary in waste characteristics due to the type of paint utilized in each booth or how the booth is operated, has not been completed at this time. Most of the available waste analyses can not be definitively associated with a particular paint booth or dip tank wastestream. Not all Process Materials indicated for each process are utilized at each Process Location as indicated below:

SPRAY PAINT BOOTHS

Process Location:

Utility Body Assembly Line - 3 booths
Special Utility Body Assembly - 3 booths
Tool Box Assembly - 2 booths
Platform Assembly - 3 booths

Process Material:

Sikens Red Prime #S15/84*, (replaced "vinyl wash")
Sikens Grey Wash Prime
Sikens Harder #C25/41
Sikens 123 Reducer-Fast
Sikens 123 Reducer-Slow
Sikens 123 Reducer-Extra Slow
Sikens TR10 Reducer
Valspar Undercoat #YXR0196
Sikens Autocryl Black Top Coat
Sikens Autocryl White Top Coat
Sikens 123 Hardener
Sikens 889 Accelerator
Sikens Retarder
Valspar Prime #FXR0002 (Temporary)
Valspar Prime #AAA0422 (Temporary)
Sikens Rail Black Top coat
Sikens Flow Additive #10AHK44613

* contains zinc chromate

Process:

Except at the platform assembly, paint is pumped from a central paint kitchen with catalyst added at each individual booth. At the platform assembly, paint is mixed at individual booths. All booths are dry filter operations. Absorbent materials (paint filters and overspray paper) and paint booth dust are placed in 55-gallon drums and eventually utilized as energy resource recovery off-site.

DIP PAINT TANK

Process Location:

Side Assembly - 3 tanks

Process Material:

Valspar #FAR0001
Valspar #AAR0158
Valspar #AAA0422
Barton #100
Barton Xylene

Process:

The dip paint tanks are 700 gallon steel recirculating tanks set in concrete pits. The load bar dips the parts into the tank for 15 seconds and pauses 30 seconds to allow paint to drain back into the paint bank and then over a 12' long drip board covered with absorbent material. For eight hours the parts are air-dried, during that time excess paint drips onto absorbent material (floor drip paper). Absorbent materials are placed in 55-gallon drums and eventually utilized as energy resource recovery off-site

CLEANING ACTIVITIES

Process Location:

Utility Body Assembly Line - 3 booths
Special Utility Body Assembly - 3 booths
Tool Box Assembly - 2 booths
Platform Assembly - 3 booths
Side Assembly - 3 tanks

Process Material:

Sikens MEK
Barton Xylene
Barton Bartothane
Barton #3367

Process:

Painting pumps, lines, hoses and guns are flushed or soaked in these materials to prevent paint build-up. Spent material is placed into 55-gallon drums temporarily stored in the drum container building. Spent material is pumped from the drums into a tanker truck for utilization as energy resource recovery off-site.

OTHER

Incinerator ash is no longer generated at the facility. Solid paint residuals generated during the manufacturing processes, such as paint chips and paint sediments, are placed in 55-gallon drums and eventually utilized as energy resource recovery off-site. Off-spec paint product that can not be returned to the manufacturer and small quantity waste oils are placed into 55-gallon drums temporarily stored in the drum container building and pumped from the drums into a tanker truck for utilization as energy resource recovery off-site. Other solid wastes such as packaging, pallets and office refuse are handled as municipal wastes in the appropriate manner. Wash detergent waters containing dirt and grit are filtered and directed into the fire pond. Sanitary wastes are handled through an on-site septic field.

VENDOR	MATERIAL	607	610 1 UPSTAIRS	610 2 UPSTAIRS	609 1	609 2	609 3 HOIST	608 1	608 2 D. DRAFT	608 3 TOUCH	611 1 STEEL	611 2 PRIME	611 3 FINISH	612 EQUIPMENT 1 CLEANING
BARTON	3367													100%
BARTON	XYLENE	0.33									0.15	0.15	0.15	
BARTON	# 100	0.25												
BARTON	BARTOTHANE (CHLOROTHENE SM)										100%	100%		
SIKENS	MEK													100%
VALSPAR	UNDERCOAT #YXR0196				100%	100%			100%					
VALSPAR	PRIME #FAR0001	0.66												
VALSPAR	RED #AAR0158	0.75												
VALSPAR	BLACK #AAA0422	0.75												
VALSPAR	PRIME #FXR0002 (TEMPORARY)										85%	85%	85%	
VALSPAR	BLACK #AAA0422 (TEMPORARY)										85%	85%	85%	
SIKENS	RED PRIME #S15/84		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
SIKENS	GREY WASH PRIME		100%	100%	100%	100%	100%	100%	100%	100%				
SIKENS	HARDNER #C25/41		50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	
SIKENS	AUTOCRYL BLACK TOP COAT		100%											
SIKENS	AUTOCRYL WHITE TOP COAT		100%											
SIKENS	123 HARDNER		50%											
SIKENS	839 ACCELERATOR		10%											
SIKENS	RETARDER		1%											
SIKENS	RAIL BLACK TOP COAT										100%		100%	
SIKENS	FLOW ADDITIVE #10AHK44613										1%	1%	1%	
SIKENS	123 REDUCER -FAST		30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	
SIKENS	123 REDUCER -SLOW		30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	
SIKENS	123 REDUCER -EXTRA SLOW		30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	
SIKENS	TRIO REDUCER		30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

SECTION 8 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

SPECIFIC GRAVITY:
0.87 at 60

SOLUBILITY IN WATER, WT. % AT °F:
Less Than 0.10 at 68

SP. GRAV. OF VAPOR, at 1 atm (Air=1):
3.66

EVAPORATION RATE, n-Bu Acetate=1:
0.8

VAPOR PRESSURE, mmHg at °F:
19 at 100 Deg F

VISCOSITY OF LIQUID, CST AT °F:
1 at 77

FREEZING/MELTING POINT, °F:
-65

BOILING POINT, °F:
280 to 284

SECTION 9 REACTIVITY DATA

STABILITY:
Stable

CONDITIONS TO AVOID INSTABILITY:
Not Applicable

HAZARDOUS POLYMERIZATION:
Will not occur

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY:
Strong oxidizing agents, concentrated nitric and sulphuric acids, halogen, and molten sulphur. Temperatures above ambient.

HAZARDOUS DECOMPOSITION PRODUCTS:
None

SECTION 10 STORAGE AND HANDLING

ELECTROSTATIC ACCUMULATION HAZARD:
Yes, use proper grounding procedure

STORAGE TEMPERATURE, °F:
Ambient

STORAGE/TRANSPORT PRESSURE, mmHg:
Atmospheric

LOADING/UNLOADING TEMPERATURE, °F:
Ambient

VISC. AT LOADING/UNLOADING TEMP., cST:
1

REVISION SUMMARY:
Since MAY 11,1991 this MSDS has been revised in Section(s):
3

REFERENCE NUMBER:	DATE PREPARED:	SUPERSEDES ISSUE DATE:
HDHA-C-25004	May 17,1991	May 11,1991

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR TECHNICAL SALES REPRESENTATIVE
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 713-870-6885

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION NOR DO WE OFFER WARRANTY AGAINST PATENT INFRINGEMENT.

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MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
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VIRGIN XYLENE

PAGE: 1
DATE PREPARED: JUL 3, 1991
NO.: 92974660

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: VIRGIN XYLENE

CHEMICAL NAME:
Mixed Xylenes and Ethylbenzene CAS 1330-20-7

CHEMICAL FAMILY:
Aromatic Hydrocarbon

PRODUCT DESCRIPTION:
Aromatic odor
Clear, colorless liquid

EMERGENCY TELEPHONE NUMBERS: EXXON CHEMICAL AMERICAS 713-870-6000
CHEMTREC 800-424-9300

SECTION 2 HAZARDOUS INGREDIENT INFORMATION

The composition of this mixture may be proprietary information. In the event of a medical emergency, compositional information will be provided to a physician or nurse. This product is hazardous as defined in 29 CFR1910.1200, based on the following compositional information:

COMPONENT	OSHA HAZARD
Xylenes	Flammable
Ethylbenzene	OSHA PEL;ACGIH TLV
	Eye Irritant

For additional information see Section 3.

SECTION 3 HEALTH INFORMATION & PROTECTION

NATURE OF HAZARD

EYE CONTACT:
Irritating, but does not injure eye tissue.

SKIN CONTACT:
Frequent or prolonged contact may irritate.
Low order of toxicity.
Occasional brief contact with the liquid will not result in significant irritation unless evaporation is impeded.
Skin contact may aggravate an existing dermatitis condition.

INHALATION:
High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.
Negligible hazard at ambient temperature (-18 to 38 Deg C; 0 to 100 Deg F)

INGESTION:
Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.
Low order of toxicity.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

VIRGIN XYLENE

DATE PREPARED: JUL 3, 1991
NO.: 92974660

FIRST AID

EYE CONTACT:
Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT:
Flush with large amounts of water; use soap if available.
Remove grossly contaminated clothing, including shoes, and launder before reuse.

INHALATION:
Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION:
If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

ACUTE TOXICITY DATA IS AVAILABLE UPON REQUEST.

WORKPLACE EXPOSURE LIMITS

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS:
A TWA of 100 ppm (435 mg/m3) and a STEL of 150 ppm (655 mg/m3) for Xylenes.
A TWA of 100 ppm (435 mg/m3) and a STEL of 125 ppm (545 mg/m3) for Ethyl Benzene.

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:
A TWA of 100 ppm (434 mg/m3), and a STEL of 150 ppm (651 mg/m3) for Xylene ,
a TWA of 100 ppm (434 mg/m3), and a STEL of 125 ppm (543 mg/m3) for Ethyl Benzene.

PRECAUTIONS

SPECIAL PRECAUTIONS:
Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

PERSONAL PROTECTION:
For open systems where contact is likely, wear safety glasses with side shields, long sleeves, and chemical resistant gloves.
Where contact may occur, wear safety glasses with side shields.
Where concentrations in air may exceed the limits given in this Section and engineering, work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

VENTILATION:
The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above ambient temperatures, or is agitated.
Use explosion-proof ventilation equipment.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
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VIRGIN XYLENE

DATE PREPARED: JUL 3, 1991
NO.: 9297*660

SECTION 4 FIRE & EXPLOSION HAZARD

FLASHPOINT: 78 Deg F. METHOD: TCC
FLAMMABLE LIMITS: LEL: 1.0 UEL: 7.0
AUTOIGNITION TEMPERATURE: 930 Deg F. NOTE: Approximate

GENERAL HAZARD:
Flammable Liquid, can release vapors that form flammable mixtures at temperatures at or above the flashpoint.
Toxic gases will form upon combustion.
Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge .
"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.
Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

FIRE FIGHTING:
Use water spray to cool fire exposed surfaces and to protect personnel.
Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors.
Use foam or dry chemical to extinguish fire.
Respiratory and eye protection required for fire fighting personnel.
Avoid spraying water directly into storage containers due to danger of boilover.
This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

HAZARDOUS COMBUSTION PRODUCTS:
Fumes, smoke, and carbon monoxide.

SECTION 5 SPILL CONTROL PROCEDURE

LAND SPILL:
Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 7) notify the National Response Center.
Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust.
Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent.
Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

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WATER SPILL:
Remove from surface by skimming or with suitable adsorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined waters. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

SECTION 6 NOTES

HAZARD RATING SYSTEMS:
This information is for people trained in:
National Paint & Coatings Association's (NPCA)
Hazardous Materials Identification System (HMIS)
National Fire Protection Association (NFPA 704)
Identification of the Fire Hazards of Materials

	NPCA-HMIS	NFPA 704
HEALTH	2	2
FLAMMABILITY	3	3
REACTIVITY	0	0

KEY
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

SECTION 7 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT):
DOT PROPER SHIPPING NAME:
XYLENE, Flammable Liquid UN 1307
DOT HAZARD CLASS: Flammable liquid
DOT IDENTIFICATION NUMBER: UN 1307
NAME: Xylenes

TSCA:
This product is listed on the TSCA Inventory as a UVCB (Unknown, Variable Composition or Biological) Chemical at CAS Registry Number 1330-20-7

CERCLA:
If the reportable quantity of this product is accidentally spilled, the incident is subject to the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and must be reported to the National Response Center by calling 800-424-8802.
The reportable spill quantity of this product is 1,000 pounds.
This product contains:
Xylene, Ethylbenzene.

SARA TITLE III:
Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories:
Immediate health, Delayed Health, Fire.
This product contains the following Section 313 Reportable Ingredients:

COMPONENT	CAS NO.	MAXIMUM %
Xylene	1330-20-7	83.0
Ethylbenzene	100-41-4	17.0

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

VIRGIN XYLENE

DATE PREPARED: JUL 3, 1991
NO.: 92974660

SECTION 8 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

SPECIFIC GRAVITY:
0.87 at 60

SOLUBILITY IN WATER, WT. % AT °F:
Less Than 0.10 at 68

SP. GRAV. OF VAPOR, at 1 atm (Air=1):
3.66

EVAPORATION RATE, n-Bu Acetate=1:
0.8

VAPOR PRESSURE, mmHg at °F:
19 at 100 Deg F

VISCOSITY OF LIQUID, CST AT °F:
1 at 77

FREEZING/MELTING POINT, °F:
-65

BOILING POINT, °F:
280 to 284

SECTION 9 REACTIVITY DATA

STABILITY:
Stable

CONDITIONS TO AVOID INSTABILITY:
Not Applicable

HAZARDOUS POLYMERIZATION:
Will not occur

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY:
Strong oxidizing agents, concentrated nitric and sulphuric acids, halogen, and molten sulphur. Temperatures above ambient.

HAZARDOUS DECOMPOSITION PRODUCTS:
None

SECTION 10 STORAGE AND HANDLING

ELECTROSTATIC ACCUMULATION HAZARD:
Yes, use proper grounding procedure

STORAGE TEMPERATURE, °F:
Ambient

STORAGE/TRANSPORT PRESSURE, mmHg:
Atmospheric

LOADING/UNLOADING TEMPERATURE, °F:
Ambient

VISC. AT LOADING/UNLOADING TEMP., cST:
1

REVISION SUMMARY:
Since MAY 17,1991 this MSDS has been revised in Section(s):
1, 2, 7

REFERENCE NUMBER:	DATE PREPARED:	SUPERSEDES ISSUE DATE:
HDHA-C-25004	July 3,1991	May 17,1991

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR TECHNICAL SALES REPRESENTATIVE
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 713-870-6885

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, LIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF IN INFORMATION FOR HIS OWN PARTICULAR USE. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR W THE USE OF THIS INFORMATION NOR DO WE OFFER WARRANTY AGAINST PATENT INFRINGEMENT.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

AROMATIC 100

DATE PREPARED: NOV 7, 1991
NO.: 92940652

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: AROMATIC 100

CHEMICAL NAME:
Aromatic Hydrocarbon CAS 64742-95-6

CHEMICAL FAMILY:
Petroleum Hydrocarbon

PRODUCT DESCRIPTION:
Clear colorless liquid.

EMERGENCY TELEPHONE NUMBERS: EXXON CHEMICAL AMERICAS 713-870-6000
CHEMTREC 800-424-9300

SECTION 2 HAZARDOUS INGREDIENT INFORMATION

The composition of this mixture may be proprietary information. In the event of a medical emergency, compositional information will be provided to a physician or nurse This product is hazardous as defined in 29 CFR1910.1200, based on the following compositional information;

COMPONENT	OSHA HAZARD
Hydrocarbons	Combustible
Trimethylbenzene	OSHA PEL;ACGIH TLV
Xylene	OSHA PEL;ACGIH TLV
Cumene	OSHA PEL;ACGIH TLV
Ethylbenzene	OSHA PEL;ACGIH TLV

For additional information see Section 3.

SECTION 3 HEALTH INFORMATION & PROTECTION

NATURE OF HAZARD

EYE CONTACT:
Slightly irritating but does not injure eye tissue.

SKIN CONTACT:
Frequent or prolonged contact may irritate and cause dermatitis.
Low order of toxicity.
Skin contact may aggravate an existing dermatitis condition.

INHALATION:
High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

INGESTION:
Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.
Minimal toxicity.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

FIRST AID

EYE CONTACT:
Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT:
Flush with large amounts of water; use soap if available.
Remove grossly contaminated clothing, including shoes, and launder before reuse.

INHALATION:
Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION:
If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

ACUTE TOXICITY DATA IS AVAILABLE UPON REQUEST.

WORKPLACE EXPOSURE LIMITS

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS:
A TWA of 25 ppm (126 mg/m3) for Trimethyl Benzene.
A TWA of 100 ppm (435 mg/m3) and a STEL of 150 ppm (655 mg/m3) for Xylenes.
A TWA of 50 ppm (246 mg/m3) for Cumene (skin).
A TWA of 100 ppm (435 mg/m3) and a STEL of 125 ppm (545 mg/m3) for Ethyl Benzene.

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:
a TWA of 25 ppm (123 mg/m3) for Trimethyl Benzene.
A TWA of 100 ppm (434 mg/m3), and a STEL of 150 ppm (651 mg/m3) for Xylene .
a TWA of 50 ppm (246 mg/m3) for Cumene (skin).
a TWA of 100 ppm (434 mg/m3), and a STEL of 125 ppm (543 mg/m3) for Ethyl Benzene.

EXXON RECOMMENDS THE FOLLOWING OCCUPATIONAL EXPOSURE LIMITS:
50 ppm total hydrocarbon based on composition.

PRECAUTIONS

SPECIAL PRECAUTIONS:
Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

PERSONAL PROTECTION:
For open systems where contact is likely, wear safety glasses with side shields, long sleeves, and chemical resistant gloves.
Where contact may occur, wear safety glasses with side shields.
Where concentrations in air may exceed the limits given in this Section and engineering, work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

VENTILATION:
The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be stored and handled in a lab hood. Provide mechanical ventilation of confined spaces. See respiratory protection recommendations.

SECTION 4 FIRE & EXPLOSION HAZARD

FLASHPOINT: 106 Deg F. METHOD: TCC NOTE: Approximately
FLAMMABLE LIMITS: LEL: 0.6 UEL: 7.0
AUTOIGNITION TEMPERATURE: 869 Deg F.

GENERAL HAZARD:
Combustible liquid, can form combustible mixtures at temperatures at or above the flashpoint.
Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge .
"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

FIRE FIGHTING:
Use water spray to cool fire exposed surfaces and to protect personnel.
Isolate "fuel" supply from fire.
Use foam, dry chemical, or water spray to extinguish fire.
Avoid spraying water directly into storage containers due to danger of boilover.
This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

HAZARDOUS COMBUSTION PRODUCTS:
No Unusual

SECTION 5 SPILL CONTROL PROCEDURE

LAND SPILL:
Eliminate sources of ignition. Prevent additional discharge of material if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 7) notify the National Response Center.
Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust.
Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

WATER SPILL:
Remove from surface by skimming or with suitable adsorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined waters.
Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

SECTION 6 NOTES

HAZARD RATING SYSTEMS:
This information is for people trained in:
National Paint & Coatings Association's (NPCA)
Hazardous Materials Identification System (HMIS)
National Fire Protection Association (NFPA 704)
Identification of the Fire Hazards of Materials

	NPCA-HMIS	NFPA 704
HEALTH	1	1
FLAMMABILITY	2	2
REACTIVITY	0	0

KEY
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

SECTION 7 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT):
DOT PROPER SHIPPING NAME:
PETROLEUM NAPHTHA, Combustible Liquid UN 1255
DOT HAZARD CLASS: Combustible Liquid
DOT IDENTIFICATION NUMBER: UN 1255
NAME: Naphtha, petroleum

TSCA:
This product is listed on the TSCA Inventory as a UVCB (Unknown, Variable Composition or Biological) Chemical at CAS Registry Number 64742-95-6

CERCLA:
This product, as sold, is derived from a fraction of crude oil and is excluded from the spill reporting requirements by CERCLA Section 101(14)(F). When this product is used in a mixture or as an ingredient in another product or in a manufacturing operation, the petroleum exclusion terminates and an accidental spill may require reporting to the National Response Center at 800-424-8802.
This product contains approximately 7% of Xylene.
The reportable quantity of Xylene is 1,000 pounds.
This product contains approximately 5% of Cumene.
The reportable quantity of Cumene is 5,000 pounds.
This product contains approximately 1% of Ethylbenzene.
The reportable quantity of Ethylbenzene is 1,000 pounds.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

AROMATIC 100

DATE PREPARED: NOV 7, 1991
NO.: 92940652

SARA TITLE III:
Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories:
Delayed Health, Fire.
This product contains the following Section 313 Reportable Ingredients:

COMPONENT	CAS NO.	MAXIMUM %
1,2,4-Trimethylbenzene	95-63-6	24.0
Cumene	98-82-8	5.0
Xylene	1330-20-7	5.0
Ethylbenzene	100-41-4	1.5

SECTION 8 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

SPECIFIC GRAVITY:
0.88 at 60
Density: 7.3 lbs/gal at 59

SOLUBILITY IN WATER, WT. % AT °F:
Less Than 0.10 at 68

SP. GRAV. OF VAPOR, at 1 atm (Air=1):
4.10

EVAPORATION RATE, n-Bu Acetate=1:
0.2

VAPOR PRESSURE, mmHg at °F:
10 at 100 Approximately

VISCOSITY OF LIQUID, CST AT °F:
1 at 77

FREEZING/MELTING POINT, °F:
-63

BOILING POINT, °F:
305 to 340 Approximately

SECTION 9 REACTIVITY DATA

STABILITY:
Stable

CONDITIONS TO AVOID INSTABILITY:
Not Applicable

HAZARDOUS POLYMERIZATION:
Will not occur

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY:
Nitric acid, sulfuric acid, strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:
None

SECTION 10 STORAGE AND HANDLING

ELECTROSTATIC ACCUMULATION HAZARD:
Yes, use proper grounding procedure

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

AROMATIC 100

DATE PREPARED: NOV 7, 1991
NO.: 92940652

STORAGE TEMPERATURE, °F:
Ambient

LOADING/UNLOADING TEMPERATURE, °F:
Ambient

STORAGE/TRANSPORT PRESSURE, mmHg:
Atmospheric

VISC. AT LOADING/UNLOADING TEMP., cST:

REVISION SUMMARY:
Since AUGUST 14,1991 this MSDS has been revised in Section(s):
7

REFERENCE NUMBER:	DATE PREPARED:	SUPERSEDES ISSUE DATE:
HDHA-C-25028	November 7,1991	August 14,1991

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR TECHNICAL SALES REPRESENTATIVE
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 713-870-6885

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION NOR DO WE OFFER WARRANTY AGAINST PATENT INFRINGEMENT.

MATERIAL SAFETY DATA SHEET

IDENTITY (As used on label and list)

BARSOL A-3367

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

BARTON SOLVENTS, INC.
1920 N.E. Broadway
P. O. Box 221
Des Moines, Iowa 50301

Emergency Telephone Number:
515 265-7998
Telephone Number for Information
515 265-7998
Date Prepared 6-30-89

Section II - Hazardous Ingredients/Identity Information

Hazardous Components	CAS NO.	ACGIH TLV,ppm	OSHA PEL(ppm)	%(optional)
*Toluene	108-88-3	100	100	70
*Methyl Isobutyl Ketone	108-10-1	50	50	10
Isopropyl Alcohol	67-63-0	400	400	>9

*This product is a toxic chemical subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372.

Calculated TLV of Mixture: 116 ppm

NFPA Hazard: Health 2 Flammability 3 Reactivity 0

TLV Registered by the ACGIH

Section III - Physical/Chemical Characteristics

Boiling Point 82 110 115 °C/ 180 230 239°F

Specific Gravity (H_2O=1) 0.847

Vapor Pressure (mm Hg.) 24.3

Melting Point n/a

Vapor Density (Air = 1) 3.0

Evaporation Rate (Butyl Acetate = 1) 1.9

Solubility in Water Moderate

Appearance and Odor Clear and Water White - Ketone Odor

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) 6 °C / 43°F TCC

Flammable Limits LEL 2.0 UEL n/a

Extinguishing Media: NFPA Class B Extinguishers (CO_2 or Foam) for Class I B liquid fires.

Special Fire Fighting Procedures: Water spray may be ineffective on fire but can protect fire fighters and cool closed containers. Use fog nozzles if water is used. Use air-supplied breathing masks. Keep runoff from entering drains and sewers.

Unusual Fire and Explosion Hazards: EXTREMELY FLAMMABLE!! Keep containers tightly closed. Closed containers may explode if exposed to extreme heat. Vapors may travel long distances to source of ignition and flash back.

Section V - Reactivity Data

Stability: Unstable

Stable XX

Conditions to Avoid: Isolate from oxidizers, heat, sparks, electrical equipment and open flames.

Incompatibility (Materials to Avoid): Isolate from strong oxidizers such as permanganate.

Hazardous Decomposition or Byproducts: Carbon Monoxide and unidentified organic compounds from burning

Hazardous Polymerization : May Occur
: Will Not Occur XX

Conditions to Avoid:

MATERIAL SAFETY DATA SHEET

IDENTITY BARSOL A-3367 Page 2 Date Prepared: 6-30-89

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	No	No

Health Hazards (Acute and Chronic): INHALING: Anesthetic. Vapors may be moderately toxic. Irritates respiratory tract. May cause serious nervous system depression. Breathing of vapor may cause irritation. SKIN & EYE: Primary irritation. Repeated skin exposure may cause dermititis. Vapors may irritate eyes. INGESTION: Vapor harmful. Harmful or fatal if swallowed.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	No	No	No

Signs and Symptoms of Exposure: Headache, dizziness, drowsiness, nausea, unconsciousness, coma and possibly death in high concentration of vapors in confined areas.

Medical Conditions
Generally Aggravated by Exposure: Preexisting eye, dkin & respiratory conditions.

Emergency and First Aid Procedures: EYES: Wash with water for 15 minutes and get medical attention. SKIN: Wash with soap and water. If irritation occurs, get medical attention. Do not reuse clothes until cleaned. INHALATION: Remove to fresh air. INGESTION: Get medical attention! DO NOT INDUCE vomiting. If vomiting occurs, keep head below hips to prevent aspiration of liquid into lungs.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Eliminate all sources of ignition. Contain spill so that it does not get into streams or groundwater. Absorb with absorbent or sand. Evacuate spill area of unprotected personnel. Wear appropriate protective equipment. Water fog may be used to disperse vapors if necessary.

Waste Disposal Method: Recycle or incinerate observing local, state & Federal regulations.

Precautions to be Taken in Handling and Storing: Isolate from oxidizers, heat, sparks, electric equipment and open flame.

Other Precautions: Do not flame cut, saw, braze or weld. Empty container hazardous! Continue all label precautions. Vapors may cause flash fire.

Section VIII - Control Measures

Respiratory Protection (Specify Type): Ventilate to keep air below TLV. If above TLV, use self-contained air pack.

Ventilation Local Exhaust: Ventilate to reduce levels of air contaminants below that which may cause personal injury or illness. Special: None
Mechanical (General): Yes Other: None

Protective Gloves: Yes (must not dissolve in solvents)
Eye Protection: Required. Splash proof goggles or face shield. Do not wear contact lens
Other Protective Clothing or Equipment: Clean, body-covering clothes.
Work/Hygienic Practices: Follow safe work practices. Wash hands prior to eating or smoking.

Legal responsibility is assumed only for the fact that all studies reported here & all opinions are those of qualified experts. Buyer assumes all risk & liability. He accepts & uses this material on these conditions.

FIRST AID

EYE CONTACT:
Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT:
Flush with large amounts of water; use soap if available.
Remove grossly contaminated clothing, including shoes, and launder before reuse.

INHALATION:
Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION:
If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

ACUTE TOXICITY DATA IS AVAILABLE UPON REQUEST.

WORKPLACE EXPOSURE LIMITS

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS:
A TWA of 25 ppm (125 mg/m3) for Trimethyl Benzene.
A TWA of 100 ppm (435 mg/m3) and a STEL of 150 ppm (655 mg/m3) for Xylenes.
A TWA of 50 ppm (245 mg/m3) for Cumene (skin).
A TWA of 100 ppm (435 mg/m3) and a STEL of 125 ppm (545 mg/m3) for Ethyl Benzene.

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:
a TWA of 25 ppm (123 mg/m3) for Trimethyl Benzene.
A TWA of 100 ppm (434 mg/m3), and a STEL of 150 ppm (651 mg/m3) for Xylene .
a TWA of 50 ppm (246 mg/m3) for Cumene (skin).
a TWA of 100 ppm (434 mg/m3), and a STEL of 125 ppm (543 mg/m3) for Ethyl Benzene.

EXXON RECOMMENDS THE FOLLOWING OCCUPATIONAL EXPOSURE LIMITS:
50 ppm total hydrocarbon based on composition.

PRECAUTIONS

PERSONAL PROTECTION:
For open systems where contact is likely, wear safety glasses with side shields, long sleeves, and chemical resistant gloves.
Where contact may occur, wear safety glasses with side shields.
Where concentrations in air may exceed the limits given in this Section and engineering, work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

VENTILATION:
The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be stored and handled in a lab hood. Provide mechanical ventilation of confined spaces. See respiratory protection recommendations.

SECTION 4 FIRE & EXPLOSION HAZARD

FLASHPOINT: 106 Deg F. METHOD: TCC NOTE: Approximately
FLAMMABLE LIMITS: LEL: 0.6 UEL: 7.0
AUTOIGNITION TEMPERATURE: 869 Deg F.

GENERAL HAZARD:
Combustible Liquid, can form combustible mixtures at temperatures at or above the flashpoint.
Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge .
"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.
Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

FIRE FIGHTING:
Use water spray to cool fire exposed surfaces and to protect personnel.
Isolate "fuel" supply from fire.
Use foam, dry chemical, or water spray to extinguish fire.
Avoid spraying water directly into storage containers due to danger of boilover.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:
No Unusual

SECTION 5 SPILL CONTROL PROCEDURE

LAND SPILL:
Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 7) notify the National Response Center.
Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust.
Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent.
Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

WATER SPILL:
Remove from surface by skimming or with suitable adsorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined waters.
Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

STORAGE TEMPERATURE, °F:
Ambient

STORAGE/TRANSPORT PRESSURE, mmHg:
Atmospheric

LOADING/UNLOADING TEMPERATURE, °F:
Ambient

VISC. AT LOADING/UNLOADING TEMP., cST:
1

REVISION SUMMARY:
Since MAY 9,1991 this MSDS has been revised in Section(s):
3, 4

REFERENCE NUMBER:	DATE PREPARED:	SUPERSEDES ISSUE DATE:
HDHA-C-25028	May 22,1991	May 9,1991

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR TECHNICAL SALES REPRESENTATIVE
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 713-870-6885

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION TH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND IABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, IABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION NOR DO WE OFFER WARRANTY AGAINST PATENT INFRINGEMENT.

MATERIAL SAFETY DATA SHEET

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product code: 16896 Page: 1

Product Name: CHLOROTHENE (R) SM SOLVENT

Effective Date: 04/17/91 Date Printed: 04/29/91 MSDS:001111

1. INGREDIENTS: (% w/w, unless otherwise noted)

1,1,1-Trichloroethane	CAS# 000071-55-6	96.5% (wt.)
Diethylene.Ether (1,4-Dioxane	CAS# 000123-91-1	2.5
1,2-Butylene oxide	CAS# 000106-88-7	0.47
Nitromethane	CAS# 000075-52-5	0.34

The hazard information presented is based on tests conducted on this or similiar mixtures. Therefore, pursuant to the OSHA Hazard Communication Standard (see 29 CFR Part 1910.1200 (g)(2)(b)), the information is based on the tested mixture and not individual ingredients.

2. PHYSICAL DATA:

BOILING POINT: 165F (74C)
VAP PRESS: 100 mmHg @ 20C
VAP DENSITY: 4.55
SOL. IN WATER: 0.07 g/100g @ 25C
SP. GRAVITY: 1.321 @ 25/25C

APPEARANCE: Colorless liquid.
ODOR: Irritating odor at high concentrations.

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: None
METHOD USED: TOC, TCC, COC

FLAMMABLE LIMITS
LFL: 7.5% @ 25C
UFL: 12.5% @ 25C

EXTINGUISHING MEDIA: Water fog.

FIRE & EXPLOSION HAZARDS: Vapors of this solvent may develop a flammable atmosphere in confined or poorly-ventilated areas.

FIRE-FIGHTING EQUIPMENT: Wear positive pressure, self-contained breathing apparatus.

4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) Avoid open flames, welding

(Continued on page 2)
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* An Operating Unit of The Dow Chemical Company

4. REACTIVITY DATA: (CONTINUED)

arcs or other high temperature sources which induce thermal decomposition.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Prolonged contact with free water may result in corrosion and diminished stabilizer levels. Prolonged contact with, or storage in aluminum, its alloys, and particularly metallic aluminum and zinc powders should be avoided. These reactive metals can cause hydrochloric acid gas to form and, if confined as in an aerosol can or pump, the gas pressure may rupture the container. Avoid contact with amines.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride and very small amounts of phosgene and chlorine.

HAZARDOUS POLYMERIZATION: Will not occur.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Small leaks: Mop up, wipe up, or soak up immediately. Remove to out-of-doors.
Large spills: Evacuate area. Contain liquid; transfer to closed metal containers. Keep out of water supplies.

DISPOSAL METHOD: When disposing of the unused contents, the preferred options are to send to licensed reclaimer, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local laws and regulations. Do not dump into sewers, on the ground, or into any body of water.

Empty containers must be disposed of in accordance with all applicable federal, state and local regulations. DO NOT CUT OR WELD CONTAINER due to explosion hazard.

6. HEALTH HAZARD DATA:

EYE: May cause pain. May cause slight transient (temporary) irritation with slight transient corneal injury. Vapors may irritate eyes.

SKIN CONTACT: Prolonged or repeated exposure may cause skin

(Continued on page 3)
(R) Indicates a Trademark of The Dow Chemical Company

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6. HEALTH HAZARD DATA: (CONTINUED)

irritation. Repeated contact may cause drying or flaking of skin.

SKIN ABSORPTION: A single prolonged skin exposure is not likely to result in absorption of harmful amounts. The LD50 for rabbits is about 15,000 mg/kg.

INGESTION: Single dose oral toxicity is low. The LD50 for for rats is >10,000 mg/kg. If aspirated (liquid enters the lung), may be rapidly absorbed through the lungs and result in injury to other body systems.

INHALATION: Minimal anesthetic or narcotic effects may be seen in the range of 500-1000 ppm trichloroethane. Progressively higher levels over 1000 ppm may cause dizziness, drunkenness; concentrations as low as 10,000 ppm can cause unconsciousness and death. These high levels may also cause cardiac arrhythmias (irregular heartbeats). In confined or poorly ventilated areas, vapors which readily accumulate can cause unconsciousness and death.

SYSTEMIC & OTHER EFFECTS: Based on available data, repeated [illegible] not anticipated to cause any significant adverse

REGULATORY INFORMATION (CONTINUED)

The Workplace Hazardous Materials Information System (W.H.M.I.S.) Classification for this product is:

D1B
D2B

The Transportation of Dangerous Goods Act (T.D.G.A.) classification for this product is:

1,1,1-Trichloroethane/Class 6.1/UN2831/III

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The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult The Dow Chemical Company For Further Information.

* An Operating Unit of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET S

E PRINTED: 7/12/90 IPL # 10001 TO# S 10011

SECTION I

UFACTURERS NAME.
AKZO COATINGS AMERICA INC.

EET ADDRESS:
845 MAXWELL
TROY. MI 48084

RGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

DUCT CLASS:
SOLVENT SOLUTION

MANUFACTURERS CODE INDENTIFICATION:
10AHY44043

DE NAME:
SPECIAL CLEANING SOLVENT

SECTION II - HAZARDOUS INGREDIENTS

ARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
THYL ETHYL KETONE MEK	78-93-3	>95	200.00	590.00	200.00	590.00	70.0

SECTION III - PHYSICAL DATA

ILING RANGE:
5 - 178 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

APORATION RATE VS. ETHER:
OWER

RCENT VOLATILE BY VOLUME:
100.0

WEIGHT PER GALLON:
6.71 LBS.

MATERIAL SAFETY DATA SHEET

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

T CATEGORY:
PAINT RELATED MATERIAL.
FLAMMABLE LIQUID. NA-1263

FLASH POINT:
16F SFCC

LEL: 1.4

HA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IB

INGUISHING MEDIA:
FOAM. CARBON DIOXIDE. DRY CHEMICALS

SUAL FIRE AND EXPLOSION HAZARDS:
EEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT. SPARKS. ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. PPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY ONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. YMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

CIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO IRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

BILITY:
STABLE

OMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

ZARDOUS DECOMPOSITION PRODUCTS:
ARBON MONOXIDE. CARBON DIOXIDE. SMOKE. OXIDES OF NITROGEN.

ZARDOUS POLYMERIZATION:
LL NOT OCCUR

NDITIONS TO AVOID:
OT APPLICABLE

MATERIAL SAFETY DATA SHEET

SECTION VI - HEALTH HAZARD DATA

HRESHOLD LIMIT VALUE: SEE SECTION II.

ERGENCY AND FIRST AID PROCEDURES:
INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
KIN CONTACT: WASH WITH SOAP & WATER.
YE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES. CONSULT A PHYSICIAN.
NGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING.
CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
EDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

HE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF
HIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

TE:
YE IRRITANT. CONTACT MAY CAUSE EYE BURNS OR CORNEAL INJURY.
XCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION.
DIZZINESS. WEAKNESS. FATIGUE. NAUSEA. HEADACHE. POSSIBLE UNCONSCIOUSNESS.
AND EVEN ASPHYXIATION.
ROLONGED CONTACT WITH THE SKIN MAY LEAD TO EXTRACTION OF NATURAL OILS WITH
RESULTANT MILD IRRITATION.
F SWALLOWED. CAN CAUSE GASTROINTESTINAL IRRITATION. NAUSEA. VOMITING. AND
DIARRHEA. ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS
WHICH CAN BE FATAL.

TICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL
FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS
TH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

MATERIAL SAFETY DATA SHEET

SECTION VII - SPILL OR LEAK PROCEDURES

EPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV.. V.. VI.. VIII. AND IX.
REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE
JITH INERT ABSORBENT.

STE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY. DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE
OF IN ACCORDANCE WITH FEDERAL. STATE. AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

SPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE.
SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION.
IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.
NTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV
AND LEL. FOR BAKING FINISHES. EXHAUST VAPORS EMITTED ON HEATING. REMOVE
DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED
JITH THIS PRODUCT.
OTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER
FOR EFFECTIVE GLOVE RECOMMENDATIONS.
E PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

HER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON. BOOTS OR
OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY
PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.
GIENIC PRACTICES:
WASH HANDS BEFORE EATING. SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

CAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT. SPARKS AND OPEN FLAMES. CLOSE
CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE
REQUIREMENTS.
ER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE
LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT
LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID
BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE
UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

PROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
E: 7/12/90

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY. EXPRESSED OR IMPLIED. EXCEPT THAT IT IS ACCURATE
THE BEST KNOWLEDGE OF AKZO COATINGS AMERICA. THE DATA ON THIS SHEET APPLIES ONLY TO THE
ECIFIC MATERIAL DESIGNATED HEREIN. AKZO COATINGS AMERICA ASSUMES NO LEGAL RESPONSIBILITY FOR
E OR RELIANCE UPON THIS DATA.

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT. 10AHY44043 . CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT
78-93-3	METHYL ETHYL KETONE	100.1

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

Valspar Industrial Coatings

TECHNICAL DATA

TENTATIVE DATA SHEET

Customer: KNAPHEIDE
Product Number: VXR0196
Product Description: RED TRAILER UNDERBODY COATING

MATERIAL SPECIFICATIONS AS SUPPLIED

Resin Type: MODIFIED SULFONATE
Weight Per Gallon: 9.2 +/- .1 LBS
Viscosity: 3-8,000 cps :RVT BROOKFIELD 10 RPM #3 SPINDLE
Solids by Weight: 64.5 +/- 2
Solids by Volume: 49

APPLICATION RECOMMENDATIONS

Substrate: BARE STEEL
Reduction: NONE
Application: AIRLESS SPRAY
Application Viscosity: 3-8,000 cps
Cure Schedule: AIR DRY
Clean-up Solvent: ALIPHATICS, AROMATICS OR KETONES

CURED FILM SPECIFICATIONS

Film Thickness: 5-6 mils minimum, 10 mils maximum
Gloss: NA
Hardness: NA
Flexibility: EXCELLENT
Impact: PASS GRAVELOMETER TEST: -20 F

COMMENTS

1)EXCELLENT SCRIBED AND UNSCRIBED SALT SPRAY
2)MAXIMUM VOC 3.5
3)SOLVENT:STRICTLY RULE 66 MINERAL SPIRITS

The information contained herein is based on tests and reports considered reliable but is presented without guarantee or responsibility as to the applicability or correctness of this information or the suitability of our products whether used singly or in combination with other products. The products referred to above are sold without warranty, express or implied.

The Valspar Corporation
2500 8th Avenue
East Moline, Illinois 61244
(309) 752-1450

PROPERTIES OF ALL VAL-FLEX COATINGS

See specific data sheets for physical values of your color

1. VOC: Maximum 3.5
2. Viscosity: 3-8,000 Cps, lower than other compliant coatings!
3. Gravelometer: Will pass on bare steel at -20°F and 70 psi air pressure.
4. Resists undercutting corrosion.
5. Salt Spray: Easily passes 1,000 hours salt spray (ASTM B-117) on untreated metal at 3-5 mils DFT.
6. Product meets Rule 66.
7. Flash Point: 105°F
8. Excellent adhesion to marginal surfaces.
9. Thixotropic making one coat high film builds possible.
10. Excellent early moisture resistance.
11. Cure: Flexible tack free surface upon evaporation of solvent.
12. Military: Val-Flex will pass Mil C 62218A Type I, new vehicle rust proofing specifications.
13. Cyclic Corrosion Testing: Val-Flex passes Cyclic Corrosion Testing as relied on by automobile manufacturers.
14. Material is supplied ready to use. If further dilution is desired aliphatic or aromatic solvents are compatible. Alcohols should not be used.
15. Clean-up: Aliphatic, aromatic or ketone solvents.
16. Removal: Any over spray can easily be removed with mineral spirits preventing harm to any coatings underneath.
17. Application: Airless spray is preferable but air assisted airless and other methods are useable.
18. Customer Service: Valspar's excellent application engineers and chemists stand ready to assist in any way possible.

The Valspar Corporation
2500 8th Avenue
East Moline, Illinois 61244
(309) 752-1450

Val-Flex

Valspar's Corrosion Preventative Coatings

Val-Flex utilizes field proven modified calcium sulfonate technology in conjunction with other new corrosion inhibitors to deliver a superior coating for the protection of steel surfaces everywhere.

Val-Flex's technology works by both corrosion inhibition through pH control at the metal surface and by hydrophobic barriers. This technology resists chipping and corrosion undercutting typical of many coatings.

Val-Flex cures through solvent evaporation to yield a flexible tack free surface that will stay flexible and chip resistant.

Val-Flex has been specifically formulated to be a high solids compliant coating at much lower viscosities (3-8,000 cps) than previously possible. This allows for easier application under all conditions.

Val-Flex is thixotropic so that even with a lower viscosity, high build, sag free, one coat films are no problem.

Val-Flex can be custom colored in most of the colors of the rainbow... your choice!

Val-Flex is tolerant of marginally prepared surfaces although for best performance a clean dry surface is recommended.

VAL-FLEX

UNDERSTRUCTURE CORROSION PREVENTION COATING

Name	Product #	V.O.C. Lbs/Gal
VAL-FLEX Red Understructure Corrosion Preventive Coating	YXR0196	3.5
VAL-FLEX Black Understructure Corrosion Preventive Coating	YXA0051	3.5
VAL-FLEX Aluminum Understructure Corrosion Preventive Coating	YXN0008	3.5

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : NOT APPLICABLE
TRADE NAME : 64 FAR0001 L.F. RED OXIDE DIP P
ISSUE DATE : 05-16-91 DATE PRINTED : 02-14-92

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
COMMON(NA):XYLENE	40%	TLV TWA 100.00 PPM
		TLV STEL 150.00 PPM
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		OSHA PEL 100.00 PPM
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
COMMON(NA):ETHYLBENZENE	10%	TLV TWA 100.00 PPM
		TLV STEL 125.00 PPM
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		OSHA PEL 100.00 PPM
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
COMMON(NA):KAOLIN	5%	TLV TWA 10.00 MG/CU M
		TLV STEL NOT ESTAB
CAS:1332-58-7 CHEMICAL: KAOLIN		OSHA PEL 10.00 MG/CU M
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
COMMON(NA):SILICA	10%	TLV TWA 10.00 MG/CU M
		TLV STEL NOT ESTAB
CAS:7631-86-9 CHEMICAL: SILICA		OSHA PEL 10.00 MG/CU M
		CEILING NOT ESTAB
		RECOMND NOT ESTAB

[redacted]	[redacted]	TLV TWA 0.10 MG/CU M
		TLV STEL NOT ESTAB
CAS:14808-60-7 CHEMICAL: QUARTZ		OSHA PEL 0.10 MG/CU M
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
COMMON(NA):IRON OXIDE	10%	TLV TWA NOT ESTAB
		TLV STEL NOT ESTAB
CAS:1309-37-1 CHEMICAL:		OSHA PEL 5.00 MG/CU M
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
COMMON(NA):AROMATIC NAPHTHA	1%	TLV TWA 100.00 PPM
		TLV STEL NOT ESTAB
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.		OSHA PEL NOT ESTAB
		CEILING NOT ESTAB
		RECOMND 50.00 PPM

********** SECTION 2: HAZARDOUS INGREDIENTS ****CONTINUED****

(1) = THIS MATERIAL IS A CARCINOGEN PER IARC

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 277 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.0): 4.3
SPECIFIC GRAVITY: 1.17
PERCENT VOLATILE BY VOLUME: 66.00
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 80
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 7.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC.
MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL
CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RES-
PIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY
IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND

[redacted] KIDNEY DAMAGE.

DELAYED EFFECTS (CHRONIC):

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT: FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION.

SKIN CONTACT: WASH THOROUGHLY WITH SOAP AND WATER.

INHALATION: IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR.

SWALLOWING: IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:

SILICON DIOXIDE PHENOLICS CARBON DIOXIDE/MONOXIDE
METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:

DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:

WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:

REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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CAS:95-63-6 CHEMICAL: BENZENE,1,2,4-TRIMETHYL-

TLV STEL NOT ESTAB
OSHA PEL 25.00 PPM
CEILING NOT ESTAB
RECOMND NOT ESTAB

COMMON(NA):TOLUENE 10%

CAS:108-88-3 CHEMICAL: PHENYL, METHYL

TLV TWA 100.00 PPM
TLV STEL 150.00 PPM
OSHA PEL 100.00 PPM
CEILING NOT ESTAB
RECOMND NOT ESTAB

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 230 DEG F.
VAPOR PRESSURE MM HG AT 70 DEG F: 28.0
VAPOR DENSITY (AIR = 1.0): 4.0
SPECIFIC GRAVITY: 0.97
PERCENT VOLATILE BY VOLUME: 70.62
EVAPORATION RATE (BUTYL ACETATE = 1): 2.0
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 47
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 9.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC.
MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL
CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RES-
PIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY
IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND
THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE,
KIDNEY DAMAGE, CNS DEPRESSION, CORNEAL INJURY/EYE DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL

[redacted]
DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND
INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY
RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
EYE CONTACT: FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

MINUTES AND GET MEDICAL ATTENTION.

SKIN CONTACT: WASH THOROUGHLY WITH SOAP AND WATER.

INHALATION: IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR.

SWALLOWING: IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:

[redacted] EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE.

********** SECTION 9: SPECIAL PRECAUTIONS ****CONTINUED****

INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

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VALSPAR CORPORATION
MATERIAL SAFETY DATA SHEET

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : NOT APPLICABLE
TRADE NAME : 64 AAA0422 LF GLOSS BLK EN
REVISION DATE : 07-11-91

DATE PRINTED : 02-14-92

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %		
COMMON(NA):XYLENE	35%	TLV TWA	100.00 PPM
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		TLV STEL	150.00 PPM
		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):ETHYLBENZENE	5%	TLV TWA	100.00 PPM
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		TLV STEL	125.00 PPM
		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):AROMATIC NAPHTHA	10%	TLV TWA	100.00 PPM
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM		TLV STEL	NOT ESTAB
		OSHA PEL	NOT ESTAB
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):CARBON BLACK	1%	TLV TWA	3.00 MG/CU M
CAS:1333-86-4 CHEMICAL: CARBON BLACK		TLV STEL	NOT ESTAB
		OSHA PEL	3.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

[redacted]

				TLV STEL NOT ESTAB
CAS:95-63-6	CHEMICAL:	BENZENE,1,2,4-TRIMETHYL-		OSHA PEL 25.00 PPM
				CEILING NOT ESTAB
				RECOMND NOT ESTAB
COMMON(NA):TOLUENE			10%	TLV TWA 100.00 PPM
				TLV STEL 150.00 PPM
CAS:108-88-3	CHEMICAL:	PHENYL, METHYL		OSHA PEL 100.00 PPM
				CEILING NOT ESTAB
				RECOMND NOT ESTAB

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 230 DEG F.
VAPOR PRESSURE MM HG AT 70 DEG F: 28.0
VAPOR DENSITY (AIR = 1.0): 4.0
SPECIFIC GRAVITY: 0.97
PERCENT VOLATILE BY VOLUME: 70.62
EVAPORATION RATE (BUTYL ACETATE = 1): 2.0
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 47
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 9.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC.
MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL
CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RES-
PIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY
IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND
THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE,
KIDNEY DAMAGE, CNS DEPRESSION, CORNEAL INJURY/EYE DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL

[redacted] DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
EYE CONTACT: FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

MINUTES AND GET MEDICAL ATTENTION.
SKIN CONTACT: WASH THOROUGHLY WITH SOAP AND WATER.
INHALATION: IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR.
SWALLOWING: IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:

[redacted] REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE.

********** SECTION 9: SPECIAL PRECAUTIONS ****CONTINUED****

INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH
ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL
SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

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********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : NOT APPLICABLE
TRADE NAME : 64 FXR0002 RED OXIDE PRIMER
ISSUE DATE : 05-16-91 DATE PRINTED : 02-14-92

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
COMMON(NA):AROMATIC NAPHTHA	5%	TLV TWA 100.00 PPM
		TLV STEL NOT ESTAB
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM		OSHA PEL NOT ESTAB
),LT. ARUM.		CEILING NOT ESTAB
		RECOMND 50.00 PPM
COMMON(NA):XYLENE	40%	TLV TWA 100.00 PPM
		TLV STEL 150.00 PPM
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		OSHA PEL 100.00 PPM
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
COMMON(NA):ETHYLBENZENE	10%	TLV TWA 100.00 PPM
		TLV STEL 125.00 PPM
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		OSHA PEL 100.00 PPM
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
COMMON(NA):KAOLIN	5%	TLV TWA 10.00 MG/CU M
		TLV STEL NOT ESTAB
CAS:1332-58-7 CHEMICAL: KAOLIN		OSHA PEL 10.00 MG/CU M
		CEILING NOT ESTAB
		RECOMND NOT ESTAB

CAS:7727-43-7 CHEMICAL: SULFURIC ACID, BARIUM SALT		TLV STEL	NOT ESTAB
		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):TALC	5%	TLV TWA	10.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:14807-96-6 CHEMICAL: SILICIC ACID,MAGNESIUM SALT (1:1)		OSHA PEL	2.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):IRON OXIDE	5%	TLV TWA	NOT ESTAB
		TLV STEL	NOT ESTAB
CAS:1309-37-1 CHEMICAL:		OSHA PEL	5.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

********** SECTION 2: HAZARDOUS INGREDIENTS ****CONTINUED****

COMMON(NA):N-BUTYL ALCOHOL 1%

CAS:71-36-3 CHEMICAL: 1-BUTANOL

TLV TWA 50.00 PPM
TLV STEL NOT ESTAB
OSHA PEL NOT ESTAB
CEILING 50.00 (01)
RECOMND NOT ESTAB

(1) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 243 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.0): 4.3
SPECIFIC GRAVITY: 1.16
PERCENT VOLATILE BY VOLUME: 70.21
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 16.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):

[redacted]AN [redacted] AB[redacted] [redacted] THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RES-
PIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY
IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE
NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER
DAMAGE, KIDNEY DAMAGE.

DELAYED EFFECTS (CHRONIC):

CONTAINS CRYSTALINE SILICA THAT IARC HAS CONCLUDED MAY CAUSE CANCER
IN ANIMALS BUT LIMITED EVIDENCE OF CANCER IN HUMANS.
PROLONGED EXPOSURE TO RESPIRABLE CRYSTALLINE QUARTZ (SILICA) MAY
CAUSE DELAYED (CHRONIC) LUNG INJURY (SILICOSIS)

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE, HEARING LOSS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE -- ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT:	FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION.
SKIN CONTACT:	WASH THOROUGHLY WITH SOAP AND WATER.
CLOTHING:	REMOVE CONTAMINATED CLOTHING AND SHOES. WASH CLOTHING BEFORE REUSE. THOROUGHLY CLEAN CONTAMINATED SHOES.
INHALATION:	IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR.
SWALLOWING:	IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
SILICON DIOXIDE CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

********** SECTION 8: SPECIAL PROTECTION INFORMATION ****CONTINUED****

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

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[redacted]
VENDORS OR USERS ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THIS MATERIAL.

..... END REPORT .....

MATERIAL SAFETY DATA SHEET SC

DATE OF PREP: 7/26/91 IPL # 20001 .0# S 20043

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS AMERICA INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:
POLYVINYL BUTYROL COATING

MANUFACTURERS CODE INDENTIFICATION:
37417000
37.417 000000 0 21

TRADE NAME:
SIKKENS WASHPRIMER S
15/84 ROOD

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV PPM	TLV MG/M3	PEL PPM	PEL MG/M3	VAPOR PRESS
N-BUTYL ALCOHOL	71-36-3	<5 SKIN	50.00	152.00	50.00	150.00	4.4
N-BUTANOL							
ETHYL ALCOHOL	64-17-5	10-25	1000.00	1880.00	1000.00	1900.00	44.0
GRAIN ALCOHOL							
ISOPROPYL ALCOHOL	67-63-0	10-25	400.00	985.00	400.00	980.00	33.0
ISOPROPANOL							
LEAD TITANATE	12060-00-3	<5	——	.15	——	.05	NA
INORGANIC LEAD COMPOUND							
METHYL ISOBUTYL KETONE	108-10-1	35-50	50.00	205.00	50.00	205.00	16.0
MIBK							
STRONTIUM CHROMATE	7789-06-2	<5	——	.05	——	.50	NA
TALC	14807-96-6	5-20	——	2.00	——	2.00	NA
HYDROUS MAGNESIUM SILICATE							
XYLENE	1330-20-7	<5	100.00	434.00	100.00	435.00	9.5
XYLOL							
ZINC CHROMATE	13530-65-9	<5	——	.01	——	.01	NA
ZINC YELLOW							

SECTION III - PHYSICAL DATA

BOILING RANGE:
171 - 284 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:

WEIGHT PER GALLON:
8.36 LBS.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263

FLASH POINT:
54F

LEL: 1.0

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IB

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE.

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

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SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES. CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:

EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
EYE CONTACT WITH LIQUID CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION AND A SENSATION OF SEEING HALOS AROUND LIGHTS. VAPOR EXPOSURE MAY CAUSE EYE IRRITATION, REDNESS AND TEARING.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION, DERMATITIS AND MAY ALSO BE ABSORBED THROUGH THE SKIN.
SKIN CONTACT MAY CAUSE IRRITATION, REDNESS, AND ITCHING.
EYE CONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION,AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
SWALLOWING MAY CAUSE INTOXICATION CHARACTERIZED BY UNCOORDINATION, DIZZINESS, DROWSINESS, HEADACHE, NAUSEA, MENTAL CONFUSION, POSSIBLY SLURRED SPEECH AND STUPOR, DEPENDING ON THE QUANTITY INGESTED.
ASPIRATION OF MATERIAL INTO THE LUNGS MAY CAUSE CHEMICAL PNEUMONITIS. WHICH CAN BE FATAL.
VAPORS MAY CAUSE SEVERE EYE IRRITATION, REDNESS, TEARING AND BLURRED VISION.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.
SANDING DUST OR DRY SPRAY MAY CAUSE IRRITATION TO THE RESPIRATORY SYSTEM.
DRY DUST MAY CAUSE MECHANICAL EYE IRRITATION.
ACCUMULATIONS OF SANDING DUST OR DRY SPRAY ON SKIN MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT SKIN IRRITATION.
EXCESSIVE INHALATION OF ZINC OXIDE GENERATED FROM WELDING FUMES PRODECES SYMPTOMS KNOWN AS "ZINC SHAKES", AN ACUTE SELF LIMITING CONDITION WITHOUT RECOGNIZED COMPLICATIONS OR SEQUELEA.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:

HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION. EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
PROLONGED OR CONTINUOUS OVEREXPOSURE TO VAPORS MAY RESULT IN HEARING DISORDERS.
REPEATED EXPOSURE TO SANDING DUST, SPRAY MIST OR UNWASHED HANDS MAY CAUSE BIRTH DEFECTS.

To
From
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SECTION VI - HEALTH HAZARD DATA

REPEATED EXPOSURE TO SANDING DUST, SPRAY MIST OR UNWASHED HANDS MAY CAUSE KIDNEY, NERVOUS SYSTEM, AND BLOOD CELL DAMAGE, AND LEAD POISONING.

PROLONGED AND CONTINUOUS EXPOSURE TO AN EXCESSIVE CONCENTRATION OF DUST OF ANY KIND MAY HAVE AN ADVERSE PULMONARY EFFECT ON SOME PEOPLE.

HEXAVALANT CHROMIUM FROM CHROMATE COMPOUNDS IS LISTED BY; ACGIH AS A CONFERMED HUMAN CARCINOGEN (A1), NTP AS A KNOWN CARCINOGEN AND IARC AS BEING CARCINOGENIC TO HUMANS (GROUP 1).

REPEATED OR PROLONGED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE LIVER AND KIDNEY DAMAGE.

REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE CARDIAC DISORDERS.

REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE RED BLOOD CELL AND LEUCOCYTE DISORDERS WHICH MAY RESULT IN AN ANEMIC CONDITION.

AKZO

Memorandum

To

From

Date

Subject

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SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX. REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY. DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION. IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATION.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS, AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. CONTAINS CHROMATE PIGMENTS. IF SUBJECT TO SPRAY APPLICATION, ENGINEERING AND ADMINISTRATIVE CONTROLS MUST BE INSTITUTED TO MAINTAIN AN EXPOSURE LEVEL BELOW 0.05 MG/M3. IF THIS IS NOT ADEQUATE, THE USE OF A RESPIRATOR IS RECOMMENDED. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
NAME:

DATE: 7/26/91

Memorandum

To
From
Date
Subject
Copies to

AKZO

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF AKZO COATINGS LTD. THE DATA ON THIS SHEET APPLIES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN. AKZO COATINGS LTD. ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 37417000, CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT
71-36-3	N-BUTYL ALCOHOL	1.5
12060-00-3	LEAD TITANATE	1.6
108-10-1	METHYL ISOBUTYL KETONE	32.4
7789-06-2	STRONTIUM CHROMATE	1.9
1330-20-7	XYLENE	3.0
13530-65-9	ZINC CHROMATE	2.2

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

AKZO

Memorandum

To

From

Date

Subject

Copies to

DATE PRINTED: 9/10/91 IPL # 20001 TO# S 20042

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:
MODIFIED ALKYD COATING

MANUFACTURERS CODE INDENTIFICATION:
11AFY33245

TRADE NAME:
WASHPRIMER EM GREY

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT		TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
BUTYL ACETATE ESTER SOLVENT	123-86-4	5-20		150.00	713.00	150.00	710.00	8.0
N-BUTYL ALCOHOL N-BUTANOL	71-36-3	10-25	SKIN	50.00	152.00	50.00	150.00	4.4
ETHYL ALCOHOL GRAIN ALCOHOL	64-17-5	20-35		1000.00	1880.00	1000.00	1900.00	44.0
ETHYL ACETATE ESTER SOLVENT	141-78-6	<5		400.00	1440.00	400.00	1400.00	76.0
METHYL ISOBUTYL KETONE MIBK	108-10-1	10-25		50.00	205.00	50.00	205.00	16.0
PROPYLENE GLYCOL METHYL ETHER ACETATE PM ACETATE	108-65-6	<5		-----	-----*	-----	-----*	3.8
TITANIUM DIOXIDE	13463-67-7	10-25		-----	10.00	-----	10.00	NA

SECTION III - PHYSICAL DATA

BOILING RANGE:
168 - 295 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
70.3

WEIGHT PER GALLON:
21.71 LBS.

Memorandum

To
From
Date
Subject
Copies to

AKZO

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY: FLASH POINT: LEL: 1.2

PAINT,
FLAMMABLE LIQUID, UN-1263 54F SFCC

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IB

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO

Memorandum

To

From

Date

Subject

Copies to

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:

EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
SANDING DUST OR DRY SPRAY MAY CAUSE IRRITATION TO THE RESPIRATORY SYSTEM.
EYE CONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION,AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
EYE CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
EYE CONTACT WITH LIQUID CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION AND A SENSATION OF SEEING HALOS AROUND LIGHTS. VAPOR EXPOSURE MAY CAUSE EYE IRRITATION, REDNESS AND TEARING.
DRY DUST MAY CAUSE MECHANICAL EYE IRRITATION.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
SKIN CONTACT MAY CAUSE IRRITATION, REDNESS, AND ITCHING.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION, DERMATITIS AND MAY ALSO BE ABSORBED THROUGH THE SKIN.
ACCUMULATIONS OF SANDING DUST OR DRY SPRAY ON SKIN MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT SKIN IRRITATION.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.
SWALLOWING MAY CAUSE INTOXICATION CHARACTERIZED BY UNCOORDINATION, DIZZINESS, DROWSINESS, HEADACHE, NAUSEA, MENTAL CONFUSION, POSSIBLY SLURRED SPEECH AND STUPOR, DEPENDING ON THE QUANTITY INGESTED.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:

HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
PROLONGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.
PROLONGED OR CONTINUOUS OVEREXPOSURE TO VAPORS MAY RESULT IN HEARING DISORDERS.
PROLONGED AND CONTINUOUS EXPOSURE TO AN EXCESSIVE CONCENTRATION OF DUST OF ANY KIND MAY HAVE AN ADVERSE PULMONARY EFFECT ON SOME PEOPLE.

AKZO
Memorandum
To
From
Date
Subject
Copies to

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX.
REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY, DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE.
SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION.
IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

Copies to

Subject

Date

From

To

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
DATE: 3/05/91

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF AKZO COATINGS INC. THE DATA ON THIS SHEET APPLIES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN. AKZO COATINGS INC ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 11AFY33245 , CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT
71-36-3	N-BUTYL ALCOHOL	10.8
108-10-1	METHYL ISOBUTYL KETONE	10.6
7779-90-0	ZINC PHOSPHATE	10.0

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

AKZO

Memorandum

To

From

Date

Subject

Copies to

MATERIAL SAFETY DATA SHEET S

DATE OF PREP: 10/01/90 IPL # 20001

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS AMERICA INC.

STREET ADDRESS:
650 STEPHENSON HWY.
TROY, MI 48083

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 589-3660
AFTER HOURS (313) 855-7313

PRODUCT CLASS:
CATALYTIC ACTIVATOR

MANUFACTURERS CODE INDENTIFICATION:
91007000
91.007 000000 0 14

TRADE NAME:
HARDENER C25/41

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT		TLV PPM	TLV MG/M3	PEL PPM	PEL MG/M3	VAPOR PRESS
BUTYL ACETATE	123-86-4	15-30		150.00	710.00	150.00	710.00	3.0
ESTER SOLVENT								
N-BUTYL ALCOHOL	71-36-3	10-25	SKIN	50.00	150.00	50.00	150.00	4.4
N-BUTANOL								
ETHYL ALCOHOL	64-17-5	10-25		1000.00	1900.00	1000.00	1900.00	44.0
GRAIN ALCOHOL								
ETHYL BENZENE	100-41-4	<5		100.00	435.00	100.00	435.00	10.0
AROMATIC SOLVENT								
METHYL ISOBUTYL KETONE	108-10-1	15-30		50.00	205.00	50.00	205.00	16.0
MIBK								
PHOSPHORIC ACID	7664-38-2	<5		———	1.00	———	1.00	NA
TOLUENE	108-88-3	10-25		100.00	375.00	100.00	375.00	22.0
TOLUOL								
XYLENE	1330-20-7	15-30		100.00	435.00	100.00	435.00	9.5
XYLOL								

Copies to

SECTION III - PHYSICAL DATA

Subject

BOILING RANGE:
171 - 284 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

Date

From

EVAPORATION RATE VS. ETHER:
SLOWER

To

PERCENT VOLATILE BY VOLUME:
98.0

WEIGHT PER GALLON:
7.19 LBS.

AKZO

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263

FLASH POINT:
45F

LEL: 1.0

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IB

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO
Memorandum
To
From
Date
Subject
Copies to

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, POSSIBLE UNCONSCIOUSNESS, AND EVEN ASPHYXIATION.
EYE CONTACT MAY CAUSE SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
PROLONGED CONTACT WITH THE SKIN MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT MILD IRRITATION.
IF SWALLOWED, CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, AND DIARRHEA. ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.
EYE IRRITANT, CONTACT MAY CAUSE EYE BURNS OR CORNEAL INJURY.
SWALLOWING CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, AND DIARRHEA.
CAUTION - MAY BE HARMFUL IF SWALLOWED OR INHALED.
PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DERMITITIS.
PROLONGED OR REPEATED CONTACT MAY CAUSE EYE IRRITATION.
CORROSIVE TO THE EYES, CONTACT WITH EYES MAY CAUSE BLINDNESS.
CORROSIVE TO THE SKIN. CONTACT WITH SKIN WILL CAUSE BURNS, POSSIBLE DEEP ULCERATION.
BREATHING MIST CAN CAUSE DAMAGE TO NASAL AND RESPIRATORY PASSAGES.
SWALLOWING RESULTS IN SEVERE DAMAGE TO MUCOUS MEMBRANES, AND DEEP TISSUES, AND MAY RESULT IN DEATH ON PENETRATION OF VITAL AREAS.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:
OVEREXPOSURE HAS BEEN SUGGESTED AS THE CAUSE FOR EYE DAMAGE IN HUMANS.
CHRONIC EXPOSURE MAY CAUSE LIVER AND KIDNEY DAMAGE.
HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS OF PETROLEUM PRODUCTS SHOULD BE MINIMIZED.
OVEREXPOSURE TO MATERIAL HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN HUMANS: LIVER ABNORMALITIES.
OVEREXPOSURE TO MATERIAL HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN HUMANS: CARDIAC ABNORMALITIES.
OVEREXPOSURE MAY CAUSE RED BLOOD CELL AND LEUCOCYTE DISORDERS WHICH MAY RESULT IN AN ANEMIC CONDITION.

Memorandum
To
From
Date
Subject
Copies to
AKZO

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX. REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY, DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION. IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

To
From
Date
Subject
Copies to

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
NAME:

DATE: 4/04/90

AKZO

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF AKZO COATINGS LTD. THE DATA ON THIS SHEET APPLIES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN. AKZO COATINGS LTD. ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 91007000, CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT
71-36-3	N-BUTYL ALCOHOL	14.8
100-41-4	ETHYL BENZENE	3.8
108-10-1	METHYL ISOBUTYL KETONE	16.4
7664-38-2	PHOSPHORIC ACID	4.4
108-88-3	TOLUENE	14.8
1330-20-7	XYLENE	15.9

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

AKZO

Memorandum

To

From

Date

Subject

Copies to

DATE PRINTED: 8/30/91 IPL # 20001 TG# S 20038

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:
URETHANE COATING

MANUFACTURERS CODE IDENTIFICATION:
0AHU43314242

TRADE NAME:
AUTOCRYL 242

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC AROMATIC 150	64742-94-5	15-30	50.00	245.00	500.00	2000.00	< 5.0
BUTYL ACETATE ESTER SOLVENT	123-86-4	5-20	150.00	713.00	150.00	710.00	8.0
CARBON BLACK	1333-86-4	<5	-----	3.50	-----	3.50	NA
ISOBUTYL ACETATE ESTER SOLVENT	110-19-0	5-20	150.00	713.00	150.00	700.00	12.5
XYLENE XYLOL	1330-20-7	15-30	100.00	434.00	100.00	435.00	9.5

SECTION III - PHYSICAL DATA

BOILING RANGE:
233 - 380 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
59.0

WEIGHT PER GALLON:
8.17 LBS.

Memorandum
To
From
Date
Subject
Copies to

AKZO

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT,
FLAMMABLE LIQUID, UN-1263

FLASH POINT:
72F SFCC

LEL: 1.0

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IB

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO

Memorandum

To

From

Date

Subject

Copies to

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:

EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
SANDING DUST OR DRY SPRAY MAY CAUSE IRRITATION TO THE RESPIRATORY SYSTEM.
EYE CONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION,AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
EYE CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
DRY DUST MAY CAUSE MECHANICAL EYE IRRITATION.
VAPORS MAY CAUSE SEVERE EYE IRRITATION, REDNESS, TEARING AND BLURRED VISION.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
ACCUMULATIONS OF SANDING DUST OR DRY SPRAY ON SKIN MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT SKIN IRRITATION.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:

HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
PROLONGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.
REPEATED OR PROLONGED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE LIVER AND KIDNEY DAMAGE.
REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE CARDIAC DISORDERS.
REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE RED BLOOD CELL AND LEUCOCYTE DISORDERS WHICH MAY RESULT IN AN ANEMIC CONDITION.
PROLONGED AND CONTINUOUS EXPOSURE TO AN EXCESSIVE CONCENTRATION OF DUST OF ANY KIND MAY HAVE AN ADVERSE PULMONARY EFFECT ON SOME PEOPLE.

AKZO
Memorandum
To
From
Date
Subject
Copies to

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX. REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY, DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION. IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
DATE: 9/20/89 FORMULA DATE 12/16/88

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To
From
Date
Subject
Copies to

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 0AHU43314242, CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT
1330-20-7	XYLENE	18.4

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

AKZO

Memorandum

To

From

Date

Subject

Copies to

DATE OF PREP: 6/04/90 IPL # 20001

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS AMERICA INC.

STREET ADDRESS:
650 STEPHENSON HWY.
TROY, MI 48083

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 589-3660
AFTER HOURS (313) 855-7313

PRODUCT CLASS:
MODIFIED ACRYLIC COATING

MANUFACTURERS CODE INDENTIFICATION:
37207000
37.207 000000 0 15

TRADE NAME:
AUTOCRYL FILLER CFRD

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV PPM	TLV MG/M3	PEL PPM	PEL MG/M3	VAPOR PRESS
BUTYL ACETATE	123-86-4	5-20	150.00	713.00	150.00	710.00	8.0
ESTER SOLVENT							
CALCIUM CARBONATE	471-34-1	15-30	-----	5.00	-----	-----	NA
CHALK							
KAOLIN	1332-58-7	5-20	-----	10.00	-----	10.00	NA
CLAY							
PROPYLENE GLYCOL METHYL ETHER ACETATE	108-65-6	<5	-----	-----	-----	-----	3.8
PM ACETATE							
AMORPHPOUS SILICA	7631-86-9	<5	-----	10.00	-----	6.00	NA
SILICA GEL							
TITANIUM DIOXIDE	13463-67-7	10-25	-----	10.00	-----	10.00	NA
TALC	14807-96-6	5-20	-----	2.00	-----	2.00	NA
HYDROUS MAGNESIUM SILICATE							
XYLENE	1330-20-7	10-25	100.00	434.00	100.00	435.00	9.5
XYLOL							

SECTION III - PHYSICAL DATA

BOILING RANGE:
260 - 295 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
42.6

WEIGHT PER GALLON:
14.05 LBS.

MATERIAL SAFETY DATA SHEET

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263

FLASH POINT:
22F

LEL: 1.0

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IB

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

ERGENCY AND FIRST AID PROCEDURES:
INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING.
CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, POSSIBLE UNCONSCIOUSNESS, AND EVEN ASPHYXIATION.
EYE CONTACT MAY CAUSE SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
PROLONGED CONTACT WITH THE SKIN MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT MILD IRRITATION.
IF SWALLOWED, CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, AND DIARRHEA. ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.
DRY PIGMENT MAY CAUSE A NUISANCE DUST, WHICH CAN BE IRRITATING TO RESPIRATORY SYSTEM.
PROLONGED OR REPEATED CONTACT MAY CAUSE EYE IRRITATION.
VAPORS AND FUMES MAY BE IRRITATING TO UPPER RESPIRATORY TRACT.
MODERATELY TOXIC IF SWALLOWED. MAY CAUSE HEADACHE, NAUSEA, VOMITING, AND WEAKNESS.
VAPORS MAY BE IRRITATING AND CAUSE COUGHING, HEADACHE, NAUSEA, AND VOMITING.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL R FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS ITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:
PROLONGED EXPOSURE TO SPRAY MIST OR SANDING DUST MAY CAUSE LUNG DAMAGE.
CHRONIC EXPOSURE MAY CAUSE LIVER AND KIDNEY DAMAGE.
OVEREXPOSURE TO MATERIAL HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN HUMANS: CARDIAC ABNORMALITIES.
OVEREXPOSURE MAY CAUSE RED BLOOD CELL AND LEUCOCYTE DISORDERS WHICH MAY RESULT IN AN ANEMIC CONDITION.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX.
REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY, DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION. IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
NAME:

DATE: 6/04/90

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SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 37207000, CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT
1330-20-7	XYLENE	10.2
7779-90-0	ZINC PHOSPHATE	10.9

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

DATE PRINTED: 7/02/91 IPL # 20002 TD# SI20075

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:
POLYISOCYANATE ACTIVATOR

MANUFACTURERS CODE IDENTIFICATION:
10AHU43159

TRADE NAME:
AUTOCRYL 1.2.3 HARDENER

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
ALIPHATIC POLYISOCYANATE RESIN	28182-81-2	35-50	-----	1.00	-----	-----	NA
DIISOCYANATE POLYMER							
BUTYL ACETATE	123-86-4	30-45	150.00	713.00	150.00	710.00	8.0
ESTER SOLVENT							
ETHYL BENZENE	100-41-4	<5	100.00	434.00	100.00	435.00	10.0
AROMATIC SOLVENT							
HEXAMETHYLENE DIISOCYANATE MONOMER	822-06-0	<5	.01	.03	-----	-----	NA
DIISOCYANATE MONOMER							
PROPYLENE GLYCOL METHYL ETHER ACETATE	108-65-6	5-20	-----	-----	-----	-----	3.8
PM ACETATE							
XYLENE	1330-20-7	20-35	100.00	434.00	100.00	435.00	9.5
XYLOL							

SECTION III - PHYSICAL DATA

BOILING RANGE:
260 - 295 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
68.1

WEIGHT PER GALLON:
8.05 LBS.

Memorandum

To
From
Date
Subject
Copies to

AKZO

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263

FLASH POINT:
81F SFCC

LEL: 1.0

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS, AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
WATER, AMINES.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR.

CONDITIONS TO AVOID:
CONTACT WITH MOISTURE AND OTHER MATERIALS WHICH REACT WITH ISOCYANATES.

AKZO

Memorandum

To

From

Date

Subject

Copies to

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION:
RESPIRATORY AND/OR SKIN SENSITIVITY TO ISOCYANATES MAY CAUSE ALLERGIC REACTIONS.

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:

EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
EXPOSURE TO VAPOR OR SPRAY MIST MAY CAUSE COUGHING AND CHEST PAINS, IRRITATION TO NOSE, THROAT AND RESPIRATORY PASSAGES, AND MAY CAUSE REDUCED LUNG FUNCTION SUCH AS BRONCHITIS, SUDDEN BRONCHIAL SPASM AND PULMONARY EDEMA.
EXPOSURE TO SPRAY MIST MAY CAUSE COUGHING AND CHEST PAINS, IRRITATION TO NOSE, THROAT AND RESPIRATORY PASSAGES, AND MAY CAUSE REDUCED LUNG FUNCTION, SUCH AS BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA.
INHALATION OF SPRAY MIST OR VAPORS MAY CAUSE ASTHMATIC EFFECTS TO THE RESPIRATORY SYSTEM.
EYE CONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION,AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
EYE CONTACT MAY CAUSE IRRITATION.
EYE CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
VAPORS MAY CAUSE SEVERE EYE IRRITATION, REDNESS, TEARING AND BLURRED VISION.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
SKIN CONTACT WITH LIQUID OR SPRAY MIST MAY CAUSE IRRITATION, REDNESS AND ITCHING.
MAY CAUSE SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:

HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
PROLONGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.
REPEATED OR PROLONGED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE LIVER AND KIDNEY DAMAGE.
EFFECTS FROM INHALATION AND SKIN CONTACT MAY BE DELAYED AFTER EXPOSURE PERIOD.
REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE CARDIAC DISORDERS.
REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE RED BLOOD CELL AND LEUCOCYTE DISORDERS WHICH MAY RESULT IN AN ANEMIC CONDITION.
PREVIOUS OVEREXPOSURES TO SPRAY MIST MAY CAUSE SENSITIZATION TO SKIN AND RESPIRATORY PASSAGES. SENSITIZATION MAY BECOME PERMANENT IN SOME INDIVIDUALS.

To
From
Date
Subject
Copies to

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX. REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT. FLUSH AREA WITH WATER INTO DRUMS AND TREAT WITH WATER CONTAINING 1% AMMONIA BEFORE DISPOSAL.

WASTE DISPOSAL METHOD:
INCINERATE IN APPROVED FACILITY, DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION. IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW GIVEN TLV & LEL FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED DURING USE. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS, OR OTHER PROTECTIVE CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES OR LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS, AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. CONTAINS ISOCYANATE AND IS SENSITIVE TO MOISTURE, AND SHOULD BE KEPT IN TIGHTLY CLOSED CONTAINERS. CAN CAUSE ALLERGIC RESPIRATORY REACTION. KEEP CLOUSRES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
DATE: 5/07/90 FORMULA DATE 12/16/88

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Memorandum

To

From

Date

Subject

Copies to

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 10AHU43159 , CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT
100-41-4	ETHYL BENZENE	3.3
1330-20-7	XYLENE	20.2

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

AKZO

Memorandum

To

From

Date

Subject

Copies to

MATERIAL SAFETY DATA SHEET

SECTION VI - HEALTH HAZARD DATA

HOLD LIMIT VALUE: SEE SECTION II.

Y AND FIRST AID PROCEDURES:
LATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
CONTACT: WASH WITH SOAP & WATER.
ONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, CONSULT A PHYSICIAN.
STION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING.
CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
AL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

OLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

SIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
ESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
ONTACT CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
ONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION,AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
S MAY CAUSE SEVERE EYE IRRITATION, REDNESS, TEARING AND BLURRED VISION.
LONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
OWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

CE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL AL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS ERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

:
H STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
NGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.
TED OR PROLONGED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE LIVER AND KIDNEY DAMAGE.
ATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE CARDIAC DISORDERS.
ATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE RED BLOOD CELL AND LEUCOCYTE DISORDERS WHICH MAY RESULT IN AN ANEMIC CONDITION.

AKZO
Memorandum
To
From
Date
Subject
Copies to

DATE PRINTED: 8/30/91 IPL # 10001 TD# S 10011

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1345 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:

MANUFACTURERS CODE INDENTIFICATION:
10AHU43853

TRADE NAME:
ACCELERATOR 889 (99.250)

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
ACETONE	67-64-1	25-40	750.00	1780.00	750.00	1800.00	186.0
KETONE							
BUTYL ACETATE	123-86-4	15-30	150.00	713.00	150.00	710.00	8.0
ESTER SOLVENT							
ETHYL ACETATE	141-78-6	5-20	400.00	1440.00	400.00	1400.00	76.0
ESTER SOLVENT							
ETHYL BENZENE	100-41-4	<5	100.00	434.00	100.00	435.00	10.0
AROMATIC SOLVENT							
ISOPROPYL ALCOHOL	67-63-0	<5	400.00	985.00	400.00	980.00	33.0
ISOPROPANOL							
PROPYLENE GLYCOL METHYL ETHER ACETATE	108-65-6	5-20	-----	-----	-----	-----	3.8
PM ACETATE							
TOLUENE	108-88-3	15-30	100.00	377.00	100.00	375.00	22.0
TOLUOL							
XYLENE	1330-20-7	5-20	100.00	434.00	100.00	435.00	9.5
XYLOL							

SECTION III - PHYSICAL DATA

BOILING RANGE:
133 - 295 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
92.6

WEIGHT PER GALLON:
7.28 LBS.

AKZO

Memorandum

To
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Copies to

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263

FLASH POINT:
4F SFCC

LEL: 1.0

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IB

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO

Memorandum

To

From

Date

Subject

Copies to

DATE PRINTED: 12/02/91 IPL # 20015 TOB # 20056

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:
REDUCTION SOLUTIONS

MANUFACTURERS CODE INDENTIFICATION:
10AW431507

TRADE NAME:
1,2,3 RETARDER

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	C.A.S. NO.	PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC AROMATIC 150	64742-94-5	5-20	50.00	245.00	500.00	2000.00	(5.0
BUTYL ACETATE ESTER SOLVENT	123-86-4	20-35	150.00	713.00	150.00	710.00	8.0
2-BUTOXYETHYL ACETATE BUTYL CELLOSOLVE ACETATE	112-07-2	25-40	-----	-----	-----	-----	.3
DIACETONE ALCOHOL KETONE SOLVENT	123-42-2	5-20	50.00	238.00	50.00	240.00	.8
PROPYLENE GLYCOL METHYL ETHER ACETATE PM ACETATE	108-65-6	40-55	-----	-----	-----	-----	3.8

SECTION III - PHYSICAL DATA

BOILING RANGE:
260 - 380 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
100.0

WEIGHT PER GALLON:
7.78 LBS.

Memorandum
To
From
Date
Subject
Copies to

AKZO

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY: FLASH POINT: LEL: .3

PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263 98F SFCC

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO

Memorandum

To

From

Date

Subject

Copies to

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

MERGENCY AND FIRST AID PROCEDURES:
INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING.
CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

UTE:
EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
EYE CONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
EYE CONTACT MAY CAUSE IRRITATION.
EYE CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION, DERMATITIS AND MAY ALSO BE ABSORBED THROUGH THE SKIN.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

RONIC:
HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
PROLONGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.
ANIMAL STUDIES HAVE SHOWN THAT REPEATED EXPOSURE TO VAPORS CAN CAUSE BLOOD CELL AND KIDNEY DAMAGE.

AKZO
Memorandum
To
From
Date
Subject
Copies to

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX.
REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY, DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION.
IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

Copies to

Subject

Date

From

To

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
DATE: 9/08/87

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AKZO

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 10AHY31507 , CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

AKZO

Memorandum

To

From

Date

Subject

Copies to

DATE PRINTED: 1/15/92 IPL # 20001 TS# 5 20033

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0900
AFTER HOURS (313) 637-5210

PRODUCT CLASS:
MODIFIED ALKYD COATING

MANUFACTURERS CODE IDENTIFICATION:
4AHK43633

TRADE NAME:
RAIL BLACK A.D. ENAMEL

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
CARBON BLACK	1333-86-4	(5	-----	3.50	-----	3.50	NA
ETHYL BENZENE	100-41-4	5-20	100.00	434.00	100.00	435.00	10.0
AROMATIC SOLVENT							
XYLENE	1330-20-7	55-70	100.00	434.00	100.00	435.00	9.5
XYLOL							

SECTION III - PHYSICAL DATA

BOILING RANGE:
177 - 284 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
68.8

WEIGHT PER GALLON:
7.92 LBS.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT,
FLAMMABLE LIQUID, UN-1263

FLASH POINT:
80F SFCC

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES; CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING.
CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:

EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION; DIZZINESS; WEAKNESS; FATIGUE; NAUSEA; HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
SANDING DUST OR DRY SPRAY MAY CAUSE IRRITATION TO THE RESPIRATORY SYSTEM.
EYE CONTACT CAUSES IRRITATION; REDNESS; TEARING; BLURRED VISION;AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
DRY DUST MAY CAUSE MECHANICAL EYE IRRITATION.
VAPORS MAY CAUSE SEVERE EYE IRRITATION; REDNESS; TEARING AND BLURRED VISION.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN; CRACKING; IRRITATION AND DERMATITIS.
ACCUMULATIONS OF SANDING DUST OR DRY SPRAY ON SKIN MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT SKIN IRRITATION.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION; NAUSEA; VOMITING AND DIARRHEA.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:

HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
REPEATED OR PROLONGED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE LIVER AND KIDNEY DAMAGE.
REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE CARDIAC DISORDERS.
REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE RED BLOOD CELL AND LEUCOCYTE DISORDERS WHICH MAY RESULT IN AN ANEMIC CONDITION.
PROLONGED AND CONTINUOUS EXPOSURE TO AN EXCESSIVE CONCENTRATION OF DUST OF ANY KIND MAY HAVE AN ADVERSE PULMONARY EFFECT ON SOME PEOPLE.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX.
REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY, DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION.
IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
DATE: 1/08/90

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF AKZO COATINGS INC. THE DATA ON THIS SHEET APPLIES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN. AKZO COATINGS INC. ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 9AHK93A33 , CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT
100-41-4	ETHYL BENZENE	2.6
1330-20-7	XYLENE	56.6

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

MATERIAL SAFETY DATA SHEET

provisional

IDENTIFICATION SECTION

PRODUCT NAME: 10AHK44613 Flow Additive

HMIS: 1*30 B

MANUFACTURER: Akzo Coatings

3295 River Exchange Drive, Norcross, Georgia

EMERGENCY CONTACT: 1-800-424-9300 (CHEMTREC)

HAZARDOUS MATERIAL DESCRIPTION - DOT SHIPPING NAME:
Flammable Liquid, n.o.s., UN1993
(contains Xylene)

TSCA INVENTORY: Yes

CHEMICAL FAMILY:
Solution of a polyether modified dimethylpolysiloxane copolymer

USE: Paint additive

HAZARDOUS INGREDIENTS

CAS NUMBER	%(Wt)	CHEMICAL NAME	TLV(ACGIH) [ppm]	STEL(ACGIH) [ppm]	PEL(OSHA) [ppm]	CARCIN-OGEN	LD_{50}(oral,rat) [mg/kg]
1330-20-7	68	Xylene	100	150	100	no	4300
122-99-6	20	2-Phenoxyethanol	(25)	-	-	no	5500

() = recommended by supplier

NON-HAZARDOUS INGREDIENTS

Information concerning non-hazardous ingredients is considered a Trade Secret

PHYSICAL DATA

BOILING RANGE (Solv.):	275-310 °F (135-154 °C)	SPECIFIC GRAVITY (H_2O=1):	0.93
FREEZING POINT:	not available	EVAPORATION RATE:	not available
VAPOR DENSITY (AIR=1):	> 1	SOLUBILITY IN WATER:	insoluble
VAPOR PRESSURE (@ 20 C):	6 mm Hg	PH VALUE:	not available
APPEARANCE :	Light yellow liquid	WATER/OIL DISTRIBUTION COEFF.:	not available
ODOR :	non-specific	ODOR THRESHOLD :	not available

FIRE AND EXPLOSION DATA

FLASH POINT: 77 °F (25 °C) Seta Flash

FLAMMABLE LIMITS (% Vol in air): LEL= 1.2, UEL= 7.0

AUTO IGNITION TEMPERATURE: not available

EXTINGUISHING MEDIA: Foam, carbon dioxide, or dry chemical

HAZARDOUS COMBUSTION PRODUCTS: Carbon mono/dioxide

SPECIAL FIRE FIGHTING PROCEDURES: Wear full body protective clothing and self-contained breathing apparatus. Water spray may be used to keep fire exposed containers cool.

FIRE AND EXPLOSION HAZARDS: Keep away from heat and flames. Prevent static discharge. Keep away from oxidizing materials. Will not explode upon mechanical impact.

REACTIVITY DATA

STABILITY:	Stable	CONDITIONS TO AVOID:	None known
INCOMPATIBILITY:	None known	HAZARDOUS DECOMPOSITION PRODUCTS:	None known
HAZARDOUS POLYMERIZATION:	Will not occur	CONDITIONS TO AVOID:	None known

HEALTH HAZARD DATA

TOXICOLOGICAL DATA: LD_{50} (oral, rat) = > 10000 mg/kg (active ingredient)
Skin (rabbit) : non-irritant (active ingredient) Eye (rabbit):non-irritant (active ingredient)
Carcinogenicity, reproductive toxicity, teratogenicity, mutagenicity and sensitization of the product : Not Available
EXPOSURE LIMITS: Refer to Hazardous Ingredients Section
EFFECTS OF OVEREXPOSURE:
Acute: Inhalation: High concentrations of vapors may be irritating to the respiratory tract. May cause headaches, dizziness, nausea and vomiting. May cause CNS depression (drowsiness, loss of coordination and fatigue).
Eye: Repeated or prolonged eye contact may cause irritation.
Skin: Repeated or prolonged skin contact may cause irritation.
Ingestion: Repeated ingestion may cause irritation of the digestional tract.
Chronic: Absorption of solvents by inhalation and/or repeated skin contact may cause injury to liver, kidney, respiratory system, blood, and/or bone marrow.
Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY OVEREXPOSURE: May be aggravating to some skin and asthma-type conditions, and to pre-existing liver and/or kidney disorders.
ROUTES OF ENTRY: Inhalation: possible Eye: possible
Skin: Contact-possible; Absorption-possible Ingestion: not likely
FIRST AID MEASURES:
Inhalation: Remove to fresh air. Administer artificial respiration if necessary.
Eye: Immediately flush with plenty of water for at least 15 minutes. Get medical aid.
Skin: Remove contaminated clothing. Wash thoroughly with soap and water.
Ingestion: Do not induce vomiting. Dilute with large amounts of milk/water. Get medical aid. Treat symptomatically. Never give anything by mouth to an unconscious person.

PREVENTIVE MEASURES

PERSONAL AND SPECIAL PROTECTION INFORMATION:
RESPIRATORY: Unless air monitoring demonstrates vapor/mist/dust levels are below the TLV wear a properly fitted respirator (NIOSH/MSHA approved) during exposure.
VENTILATION: Local exhaust recommended.
EYE PROTECTION: Safety glasses; goggles recommended
GLOVES: Impervious type (Neoprene)
OTHER EQUIPMENT: Clean long legged, long sleeved work clothes
WORK PRACTICES: Use in accordance with good industrial hygiene and safety practices.

SPILL OR LEAK PROCEDURES:
Eliminate all sources of ignition. Ventilate area if indoors. Wear self-contained breathing apparatus and full protective clothing. Stop leak. Dike and contain spill. Pump into salvage tanks and/or absorb with suitable material. Use sparkless shovels to remove material.
WASTE DISPOSAL:
Dispose of in accordance with applicable local, state and federal laws. EPA Hazardous Waste Number: D001 (ignitable). Incineration recommended.
STORAGE AND HANDLING PRECAUTIONS:
HARMFUL if absorbed through skin. Avoid skin and eye contact. Avoid prolonged breathing of mists/vapors/dusts. Avoid heat, flame, sources of ignition. Take precautionary measures against static discharge. Handle as an industrial chemical. Keep container tightly closed when not in use.

PREPARATION INFORMATION

DATE PRINTED: 12/02/91 IPL # 20001 TOB # 20030

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:
SOLVENT SOLUTION

MANUFACTURERS CODE INDENTIFICATION:
10AHY31775A

TRADE NAME:
123 REDUCER FAST MPCR

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	% PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
BUTYL ACETATE ESTER SOLVENT	123-86-4	50-65%	150.00	713.00	150.00	710.00	8.0
PROPYLENE GLYCOL METHYL ETHER GLYCOL ETHER PM	107-98-2	20-35%	100.00	369.00	100.00	360.00	12.5
PROPYLENE GLYCOL METHYL ETHER ACETATE PM ACETATE	108-65-6	20-35%	-----	-----	-----	-----	3.5
XYLENE XYLOL	1330-20-7	5-20%	100.00	434.00	100.00	435.00	9.5

SECTION III - PHYSICAL DATA

BOILING RANGE:
248 - 295 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
100.0

WEIGHT PER GALLON:
7.52 LBS.

Memorandum
Copies to
Subject
Date
From
To

AKZO

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY: FLASH POINT: LEL: 1.0

PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263 81F SFCC

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO

Memorandum

To

From

Date

Subject

Copies to

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES; CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:

EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL; THROAT AND RESPIRATORY IRRITATION; DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
EYE CONTACT CAUSES IRRITATION; REDNESS; TEARING; BLURRED VISION;AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
EYE CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION; AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
VAPORS MAY CAUSE SEVERE EYE IRRITATION; REDNESS; TEARING AND BLURRED VISION.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN; CRACKING; IRRITATION AND DERMATITIS.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA; VOMITING AND DIARRHEA.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:

HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
PROLONGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.
REPEATED OR PROLONGED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE LIVER AND KIDNEY DAMAGE.
REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE CARDIAC DISORDERS.
REPEATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE RED BLOOD CELL AND LEUCOCYTE DISORDERS WHICH MAY RESULT IN AN ANEMIC CONDITION.

AKZO

Memorandum

To

From

Date

Subject

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SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX.
REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY; DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION.
IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES; EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

Copies to

Subject

Date

From

To

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
DATE: 9/22/87

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY; EXPRESSED OR IMPLIED; EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF AKZO COATINGS INC. THE DATA ON THIS SHEET APPLIES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN. AKZO COATINGS INC. ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 16AHY31775A , CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT
1330-20-7	XYLENE	8.1

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

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Memorandum

To

From

Date

Subject

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MATERIAL SAFETY DATA SHEET

DATE PRINTED: 12/02/91 IPL # 20019 TD# 3 20456

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:
REDUCTION SOLUTIONS

MANUFACTURERS CODE INDENTIFICATION:
10AHY31484

TRADE NAME:
123 REDUCER SLOW NPCR 96179

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC AROMATIC 100	64742-95-6	5-20	50.00	245.00	500.00	2000.00	< 3.0
BUTYL ACETATE ESTER SOLVENT	123-86-4	35-50	150.00	713.00	150.00	710.00	8.0
2-BUTOXYETHYL ACETATE BUTYL CELLOSOLVE ACETATE	112-07-2	5-20	-----	-----	-----	-----	.3
DIACETONE ALCOHOL KETONE SOLVENT	123-42-2	<5	50.00	238.00	50.00	240.00	.8
PROPYLENE GLYCOL METHYL ETHER GLYCOL ETHER PM	107-98-2	15-30	100.00	369.00	100.00	360.00	12.5
PROPYLENE GLYCOL METHYL ETHER ACETATE PM ACETATE	108-65-6	30-45	-----	-----	-----	-----	3.8

SECTION III - PHYSICAL DATA

BOILING RANGE:
248 - 367 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
100.0

WEIGHT PER GALLON:
7.62 LBS.

Memorandum

AKZO

To
From
Date
Subject
Copies to

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263

FLASH POINT: 78F SFCC

LEL: .8

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO

Memorandum

To

From

Date

Subject

Copies to

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES; CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:

EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION; DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
EYE CONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION,AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
EYE CONTACT MAY CAUSE IRRITATION.
EYE CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION, DERMATITIS AND MAY ALSO BE ABSORBED THROUGH THE SKIN.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:

HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
PROLONGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.
ANIMAL STUDIES HAVE SHOWN THAT REPEATED EXPOSURE TO VAPORS CAN CAUSE BLOOD CELL AND KIDNEY DAMAGE.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX.
REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY; DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE.
SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION.
IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

Copies to

Subject

Date

From

To

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
DATE: 12/18/87

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF AKZO COATINGS INC. THE DATA ON THIS SHEET APPLIES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN. AKZO COATINGS INC ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.

Memorandum

AKZO

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 16AHY31934 , CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

AKZO

Memorandum

To

From

Date

Subject

Copies to

MATERIAL SAFETY DATA SHEET

DATE PRINTED: 12/02/91 IPL # 20001 TOW 5 20033

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 255-7313

PRODUCT CLASS:
REDUCTION SOLUTIONS

MANUFACTURERS CODE INDENTIFICATION:
10AHY31763

TRADE NAME:
123 REDUCER EX-SLOW WPCR

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	% PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
AROMATIC PETROLEUM DISTILLATE	00 0	5-20	100.00	-----	-----	-----	NA
AROMATIC SOLVENT							
BUTYL ACETATE	123-86-4	25-40	150.00	713.00	150.00	710.00	8.0
ESTER SOLVENT							
DIACETONE ALCOHOL	123-42-2	5-20	50.00	238.00	50.00	240.00	.8
KETONE SOLVENT							
PROPYLENE GLYCOL METHYL ETHER	107-98-2	15-30	100.00	369.00	100.00	360.00	12.5
GLYCOL ETHER PM							
PROPYLENE GLYCOL METHYL ETHER ACETATE	108-65-6	30-45	-----	-----	-----	-----	3.8
PM ACETATE							

SECTION III - PHYSICAL DATA

BOILING RANGE:
298 - 367 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
100.0

WEIGHT PER GALLON:
7.71 LBS.

Memorandum
Copies to
Subject
Date
From
To

AKZO

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY: FLASH POINT: LEL: .8
PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263 87F SFCC

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO

Memorandum

To

From

Date

Subject

Copies to

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES; CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:

EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
EYE CONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
EYE CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:

HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
PROLONGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.

AKZO

Memorandum

To

From

Date

Subject

Copies to

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX.
REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY, DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION.
IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

Memorandum

To

From

Date

Subject

Copies to

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
DATE: 5/22/86

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF AKZO COATINGS INC. THE DATA ON THIS SHEET APPLIES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN. AKZO COATINGS INC. ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 16AHY31763 , CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

AKZO

Memorandum

To

From

Date

Subject

Copies to

DATE PRINTED: 8/30/91 IPL # 10001 TO# S 10011

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1345 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:

MANUFACTURERS CODE INDENTIFICATION:
10AHU43853

TRADE NAME:
ACCELERATOR 889 (99.250)

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
ACETONE	67-64-1	25-40	750.00	1780.00	750.00	1800.00	186.0
KETONE							
BUTYL ACETATE	123-86-4	15-30	150.00	713.00	150.00	710.00	8.0
ESTER SOLVENT							
ETHYL ACETATE	141-78-6	5-20	400.00	1440.00	400.00	1400.00	76.0
ESTER SOLVENT							
ETHYL BENZENE	100-41-4	<5	100.00	434.00	100.00	435.00	10.0
AROMATIC SOLVENT							
ISOPROPYL ALCOHOL	67-63-0	<5	400.00	985.00	400.00	980.00	33.0
ISOPROPANOL							
PROPYLENE GLYCOL METHYL ETHER ACETATE	108-65-6	5-20	-----	-----	-----	-----	3.8
PM ACETATE							
TOLUENE	108-88-3	15-30	100.00	377.00	100.00	375.00	22.0
TOLUOL							
XYLENE	1330-20-7	5-20	100.00	434.00	100.00	435.00	9.5
XYLOL							

SECTION III - PHYSICAL DATA

BOILING RANGE:
133 - 295 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
92.6

WEIGHT PER GALLON:
7.28 LBS.

Memorandum

To
From
Date
Subject
Copies to

AKZO

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263

FLASH POINT:
4F SFCC

LEL: 1.0

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IB

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO

Memorandum

To

From

Date

Subject

Copies to

SECTION VI - HEALTH HAZARD DATA

HOLD LIMIT VALUE: SEE SECTION II.

NCY AND FIRST AID PROCEDURES:
LATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
CONTACT: WASH WITH SOAP & WATER.
CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, CONSULT A PHYSICIAN.
STION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING.
CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
CAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
SSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
CONTACT CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
CONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION,AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
ORS MAY CAUSE SEVERE EYE IRRITATION, REDNESS, TEARING AND BLURRED VISION.
LONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
LLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

E: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL ATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

C:
TH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
ONGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.
ATED OR PROLONGED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE LIVER AND KIDNEY DAMAGE.
EATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE CARDIAC DISORDERS.
EATED INHALATION OF VAPOR OR SPRAY MIST MAY CAUSE RED BLOOD CELL AND LEUCOCYTE DISORDERS WHICH MAY RESULT IN AN ANEMIC CONDITION.

AKZO

Memorandum

To

From

Date

Subject

Copies to

DATE PRINTED: 8/13/91 IPL # 20014 TO# S 20456

SECTION I

MANUFACTURERS NAME:
AKZO COATINGS INC.

STREET ADDRESS:
1845 MAXWELL
TROY, MI 48084

EMERGENCY TELEPHONE NUMBERS:
8:00AM-4:45PM (313) 637-0400
AFTER HOURS (313) 855-7313

PRODUCT CLASS:

MANUFACTURERS CODE INDENTIFICATION:
10AHY43204

TRADE NAME:
REDUCER TR-10

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	PCT BY WT	TLV-TWA PPM	TLV-TWA MG/M3	PEL-TWA PPM	PEL-TWA MG/M3	VAPOR PRESS
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC AROMATIC 150	64742-94-5	5-20	50.00	245.00	500.00	2000.00	< 5.0
BUTYL ACETATE ESTER SOLVENT	123-86-4	20-35	150.00	713.00	150.00	710.00	8.0
2-BUTOXYETHYL ACETATE BUTYL CELLOSOLVE ACETATE	112-07-2	15-30	-----	-----	-----	-----	.3
DIACETONE ALCOHOL KETONE SOLVENT	123-42-2	5-20	50.00	238.00	50.00	240.00	.8
PROPYLENE GLYCOL METHYL ETHER GLYCOL ETHER PM	107-98-2	5-20	100.00	369.00	100.00	360.00	12.5
PROPYLENE GLYCOL METHYL ETHER ACETATE PM ACETATE	108-65-6	35-50	-----	-----	-----	-----	3.8

SECTION III - PHYSICAL DATA

BOILING RANGE:
248 - 380 DEG. F

VAPOR DENSITY VS. AIR:
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:
SLOWER

PERCENT VOLATILE BY VOLUME:
100.0

WEIGHT PER GALLON:
7.73 LBS.

Memorandum

To
From
Date
Subject
Copies to

AKZO

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
PAINT RELATED MATERIAL,
FLAMMABLE LIQUID, NA-1263

FLASH POINT:
78F

LEL: .8

OSHA CLASSIFICATION:
FLAMMABLE LIQUID - CLASS IC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVER EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER MAY BE INEFFECTIVE. WATER SHOULD BE USED TO COOL CONTAINERS EXPOSED TO FIRE. FIRE FIGHTING PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY:
STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, SMOKE, OXIDES OF NITROGEN.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

CONDITIONS TO AVOID:
NOT APPLICABLE

AKZO
Memorandum
To
From
Date
Subject
Copies to

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NECESSARY.
SKIN CONTACT: WASH WITH SOAP & WATER.
EYE CONTACT: FLUSH WITH WATER FOR AT LEAST 15 MINUTES, CONSULT A PHYSICIAN.
INGESTION: DRINK ONE OR TWO GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.
MEDICAL CONDITIONS PRONE TO AGGRAVATION: NONE EXPECTED

THE FOLLOWING HAZARDS HAVE BEEN REPORTED TO BE ASSOCIATED WITH THE INDIVIDUAL COMPONENTS OF THIS PRODUCT. THESE HAZARDS MAY NOT ALL BE ASSOCIATED WITH THE FINISHED PRODUCT.

ACUTE:

EXCESSIVE VAPOR CONCENTRATION IN AIR, ESPECIALLY IN CONFINED SPACES, MAY CAUSE ASPHYXIATION.
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL, THROAT AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
EYE CONTACT CAUSES IRRITATION, REDNESS, TEARING, BLURRED VISION,AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
EYE CONTACT MAY CAUSE IRRITATION.
EYE CONTACT WITH LIQUID OR VAPOR CAUSES SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION, AND A SENSATION OF SEEING HALOS AROUND LIGHTS.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION AND DERMATITIS.
PROLONGED SKIN CONTACT MAY LEAD TO EXTRACTION OF NATURAL OILS WITH RESULTANT DRY SKIN, CRACKING, IRRITATION, DERMATITIS AND MAY ALSO BE ABSORBED THROUGH THE SKIN.
SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

NOTICE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAYBE HARMFUL OR FATAL. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

CHRONIC:

HEALTH STUDIES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. AS A PRECAUTION, EXPOSURE TO LIQUIDS AND VAPORS SHOULD BE MINIMIZED.
PROLONGED OR CONTINUOUS INHALATION OF VAPORS MAY RESULT IN DELAYED LUNG DAMAGE.
ANIMAL STUDIES HAVE SHOWN THAT REPEATED EXPOSURE TO VAPORS CAN CAUSE BLOOD CELL AND KIDNEY DAMAGE.

AKZO
Memorandum
To
From
Date
Subject
Copies to

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS IV., V., VI., VIII. AND IX. REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY, DO NOT INCINERATE CLOSED CONTAINERS. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL POLLUTION CONTROL REQUIREMENTS.

SECTION VIII - SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION:
ADEQUATE VENTILATION IS REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR DEVICE. SEE YOUR SAFETY EQUIPMENT SUPPLIER FOR EVALUATION AND RECOMMENDATION. IN CONFINED AREAS USE NIOSH/MSHA APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:
PROVIDE SUFFICIENT VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE GIVEN TLV AND LEL. FOR BAKING FINISHES, EXHAUST VAPORS EMITTED ON HEATING. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:
REQUIRED FOR PROLONGED OR REPEATED CONTACT. REFER TO SAFETY EQUIPMENT SUPPLIER FOR EFFECTIVE GLOVE RECOMMENDATIONS.

EYE PROTECTION:
USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:
EYE BATH AND SHOWER SHOULD BE AVAILABLE. USE CHEMICAL RESISTANT APRON, BOOTS OR OTHER CLOTHING IF NEEDED TO AVOID REPEATED OR FREQUENT SKIN CONTACT. LIQUID MAY PENETRATE SHOES AND LEATHER CAUSING DELAYED IRRITATION.

HYGIENIC PRACTICES:
WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT, SPARKS AND OPEN FLAMES. CLOSE CONTAINERS AFTER EACH USE. CONSULT N.F.P.A. CODE FOR ADDITIONAL STORAGE REQUIREMENTS.

OTHER PRECAUTIONS:
DO NOT TAKE INTERNALLY. USE APPROVED BONDING AND GROUNDING PROCEDURES. OBSERVE LABEL PRECAUTIONS. KEEP CLOSURES TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. NEVER USE PRESSURE TO EMPTY - DRUM IS NOT A PRESSURE VESSEL. AVOID BREATHING SANDING DUST. DO NOT WELD OR FLAME CUT AN EMPTY DRUM. DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

Copies to
Subject
Date
From
To

APPROVED BY RAW MATERIAL & FORMULA INFORMATION DEPARTMENT
DATE: 5/07/90

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF AKZO COATINGS INC. THE DATA ON THIS SHEET APPLIES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN. AKZO COATINGS INC. ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.

AKZO

SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT, 10AHY43204 , CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

CAS #	CHEMICAL NAME	% BY WEIGHT

THIS INFORMATION MUST REMAIN ATTACHED TO THE PRODUCT MSDS AND MUST BE INCLUDED AND DISTRIBUTED WITH ANY COPY OF THE MSDS.

AKZO

Memorandum

To

From

Date

Subject

Copies to

WRR
Waste Research & Reclamation Co. Inc.
Route 7, Eau Claire, WI 54701 715-834-9624 FAX: 715-836-8785

Printed on recycled paper

February 18, 1992

Knaphiede Mfg. Co.
P.O. Box C140
Quincy, IL 62306

Attn: Harold Huggins

Re: Sample I.D. #9201065

Dear Harold:

Results of the lab analysis for your WASTE PAINT RELATED MATERIAL, our sample I.D. #9201065 indicates this material can be recycled at Waste Research and returned to you. The following is our proposal on spent material for recycling or disposal.

Upon arrival at our plant, the spent material will be sampled, weighed and tested to determine recovery rates and contamination. A Laboratory Report of Incoming Materials will be sent to you as a source document for payments and verification of our service.

Waste disposal charges for material to be recycled and returned will be billed according to Schedule B - Disposal Charges for Recycled Products.

The cost of your recycled material is as follows:*

Product	Packaging	Price
Gun Cleaner	55 gal drum	$1.25/gal

*Minimum of 20 drums required to recycle individual batches.

The cost of recycled material that WRR has in inventory is as follows:

Product	Packaging	Price
Gun Cleaner	55 gal drum	$1.50/gal

Transportation Charges: See attached Terms and Conditions.

Spent material shipped to us for straight disposal will be billed according to the enclosed Schedule C - Disposal Only.

WHERE TECHNOLOGY AND ECOLOGY MEET
FOR OVER TWENTY YEARS

Off specification material could result in a price adjustment. This quote is valid for 30 days.

Should you have any questions regarding this proposal or need additional information, please call.

Sincerely,

WASTE RESEARCH & RECLAMATION CO., INC.

Jack D. Bisek

Jack D. Bisek
Sales Manager

JDB/kmk

Enclosures

cc: Dave Klein, Territory Sales Manager
Steve Johnson, Accounting
Harold Loew, Traffic

WRR
Waste Research & Reclamation Co. Inc.
Route 7, Eau Claire, WI 54701 715-834-9624 FAX: 715-836-8785

Printed on recycled paper

February 14, 1992

Knaphiede Mfg. Co.
Rt. 24
West Quincy, MO 62306

ATTN: Harold Huggins

Sample ID# 9201065 Date Received: Jan 14, 1992

PO#: 113509
copy to wrr Sales Rep: Dave Klein

Material: Waste paint related material

REPORT OF TEST RESULTS

Recyclable? yes Percent Distilled: 65%
Specific Gravity (spent) : 0.87
(distilled) : 0.848
Boiling Range: 77-134C
Flash Point: <70F
pH value: 6
Organic Composition of Distillate (vol%)

Xylene	38%
Toluene	30%
MEK	12%
Alcohol	10%
Aliphatics	4%
MIBK	3%
Hi-Sol	3%

Solids Content (non-volatile): 29.5% Ash Content: 0.19%
Heat of Combustion:
Sulfur Content: Chloride: Nitrogen:

Heavy Metals: (mg/kg)				
	Silver (Ag):	<0.3	Mercury (Hg):	<0.2
	Arsenic (As):	<0.2	Nickel (Ni):	1.2
	Barium (Ba):	<10	Lead (Pb):	7
TOTAL X	Cadmium (Cd):	<0.2	Selenium (Se):	<0.2
	Chromium (Cr):	18	Zinc (Zn):	560
TCLP EXTRACT_____	Copper (Cu):	0.3		

Projected volume: 30-40 drms/qtr
Volume on-hand:
Comments: Thin, dark brown liquid. Contains xylene, toluene, MEK, alcohols, aliphatics, MIBK and Hi-Sol.

Lab Report Prepared by Jiing-Yun Lee, Ph.D./VP
WASTE RESEARCH & RECLAMATION CO., INC.

WISCONSIN DNR CERTIFIED LABORATORY
ID # 618026530

TECHNICAL REVIEW DATE 2-13-92

Results of this lab analysis can be processed at Waste Re Office prior to shipment for

Each waste stream must be accepted by the WRR Technical Review Committee and assigned a profile number prior to shipment.

Prices on disposal items will be quoted after the receiving facility has received a request for disposal and has issued the permit.

3. WRR must be notified of shipment of a scheduled pickup or delivery 48 hours prior to the arrival at our site. At this time, all materials should be identified by the Generator's EPA Number and the Sample I.D. Number to Waste Research's Dispatcher, Lowell Greenwood.

Drums must be properly labeled and accompanied by approved D.O.T. and E.P.A. paperwork. WRR requires that the waste stream Sample I.D. Number be stenciled on all drums and printed or typed on manifests. Disposition of material must be included in Section 15, i.e. Recycle and Return or Disposal. A 24 hour emergency response telephone number must be entered on all shipping papers.

All drums received at WRR must have operable bungs in good condition. Drums with rusted, corroded, or otherwise inoperable bungs will be refused. WRR will accept steel drums only.

Transportation charges: $12.25 per drum. Subject to the availability of other less than truckload shipments in your area. Requests for emergency service precluding us from coordinating other shipments in your area could result in higher freight rates.

There will be a minimum freight charge of $25.00. We will allow up to 1 hour free loading and unloading time for less than truckload shipments and 2 hours for truckloads. After this time a $50.00 per hour demurrage charge will be assessed.

Minimum of 20 drums required to recycle individual batches.

Scheduled pricing is established for 55 gallon drums. Pricing for smaller containers will be established on an individual basis. This must be done prior to shipment.

Prior to being pumped into a holding tank, each drum is tested to determine the liquid recovery rate. The solids (if any) are collected in a separate drum and charged on a per drum basis. The disposal charge will be billed from the laboratory report of incoming materials.

1. 1,500 gallon minimum for bulk shipments.

Waste Flammable solvents with a water content in excess of 20% will be charged at a higher disposal cost, due to the increased processing required. Water layers in bulk loads of waste solvents will be charged at $1.64 per gallon to cover disposal processing costs.

3. There will be a minimum charge of $25.00 per drum for any empty containers shipped.

Drums of nonrecyclable, nondisposal material will be returned at your expense; also, there will be a charge of $25.00 per drum to cover testing and handling.

Any unscheduled or unidentified disposal or recyclable material will be disposed of at a negotiable price with Jack Bisek.

Payment Terms: Net 30 days.

C. L. METCALF
706 Forest Acres
O'Fallon, MO 63366
(314) 928-8830

June 3, 1991

Mr. Harold Huggins
Knapheide Manufacturing
436 South Sixth Street
P.O. Box 6-140
Quincy, IL 62305

RE: Examination Reports

Dear Harold:

Attached herewith please find the following analysis reports:

1. Examination of one steel plate:
   Report # 91-04-01563 dated May 21, 1991.

2. Examination of one filter sample:
   Report # 91-04-01507 dated May 6, 1991.

Upon receipt of these reports please give me a call so that we may discuss the details.

Sincerely,

C. L. Metcalf

INDUSTRIAL TESTING LABORATORIES inc.

CHEMICAL ANALYSIS

MATERIALS TESTING

ENVIRONMENTAL EVALUATION

Report No. 91-04-01507 May 6, 1991

Examination of one (1) filter sample submitted.

Knapheide Mfg.
706 Forest Acres
O'Fallon, MO 63366

Attn: Mr. Cliff Metcalf

TEST REPORT

Test	Result
TCLP Chromium	68 mg/l
TCLP Hexavalent Chromium	64 mg/l

Methods: SW-846/3010, 7196, 1311, 6010

Method Reference: "Physical/Chemical Methods" USEPA, SW-846

Symbol mg/l denotes milligrams/liter

Respectfully submitted,

Allan M. Siegel

Allan M. Siegel, P.E.
Director

LN - 204593
LB - 40053
PS/kmm

Invoice # 47779

2350 S. Seventh Street · St. Louis, Missouri 63104-4296 · 314/771-7111 · (FAX) 314-771-9573

PETRO-CHEM PROCESSING, INC.

421 Lycaste - Detroit, MI 48214
(313) 824-5840 MID 980615298

Saleeperson: Rick Powals

Prequal # W28151
Cust. #

Sample Received: 05/06/91

Date Analyzed: / /

Generator Name: KNAPHEIDE MANUFACTURING CO. City/State: WEST QUINCY, MO
Contact: STEPHEN R. MECKES Telephone: 217 222-7131
EPA ID #: MOD 000766998

Company Billed: HEARTLAND ENVIRONMENTAL City/State: KEOKUK, IA
Contact: STEVE MARSOT Telephone: 319 524-8273
EPA ID #:

Waste Stream Name: FLOOR CATCH PAPER
How Waste is Generated: PAINTING PROCESS

Freq of generation: 55 gallons every 365 days.

Physical Properties If Analyzed or Provided:

BTU/lb:	7800		
% CL:	0.00	Lbs/Gal:	1.10
% H2O:	0.00	% Solids:	0.00
pH:	7.00		

Material Disposition: Acceptable: YES

Conditions:

Waste Code(s): D007

Estimated Cost (*) IF AVAIL. Based on analysis or supplied information:

Bulk (FOB PCPI): $ (IF LIQUID)

Drum (FOB PCPI): $425.00 +10EA if <10 dr

Rejected: NO

Reason:

Generator/Hauler Copy

Attn: WHEN SHIPPING, PLEASE ADD PREQUAL # TO SECTION J OF THE MANIFEST

Attn: WHEN SHIPPING, PLEASE ADD PREQUAL # TO SECTION J OF THE MANIFEST

*Note: Prequal analysis and its quoted pricing "should be used as an APPROXIMATE value" since we cannot warranty consistency between actual material received and the samples submitted for evaluation. PRICING, AGAIN, WILL BE BASED ON SAMPLE TAKEN AT TIME OF PCPI RECEIPT.

This report will serve to inform you that Petro-Chem Processing, Inc., and its affiliated firms, have all the appropriate authorities, licenses, and permits for, and will accept your waste that has been characterized on 05/06/91 and identified by Prequal No. W28151.

5-6-91

PETRO-CHEM PROCESSING, INC.

Specializing in Hydrocarbon Processing and Reuse

Fax #: (313) 824-584

Post-It™ brand fax transmittal memo 7671 # of pages ▸

To Harold Huggins	From Steve Marsot
Co. Kwaheide MFG.	Co. Heartland Environ
Dept.	Phone # 319-524-8273
Fax # 319-222-5739	Fax # 319-524-9019

e: 05/06/91

TELECOPIER COVER LETTER
Please deliver the FOLLOWING 1 pages to:

Name: STEVE MARSOT

Firm: HEARTLAND ENVIRONMENTAL

Fax #: 319-524-9019

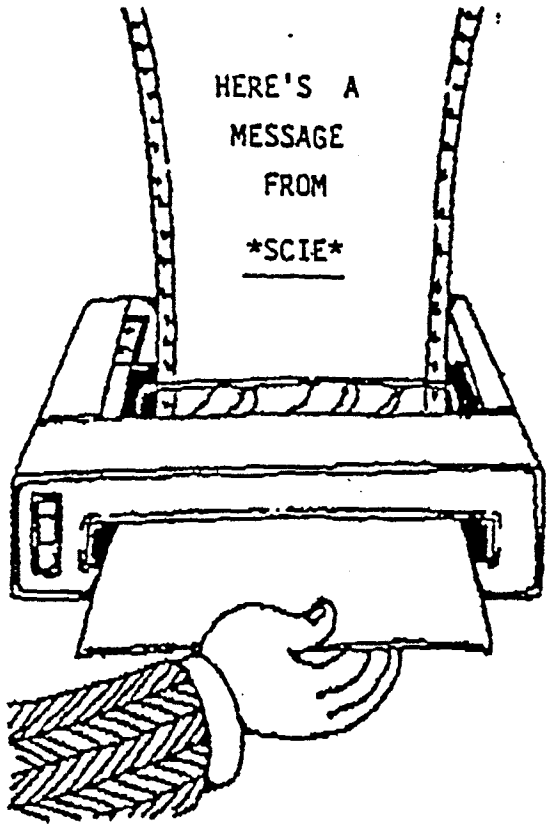
From: SAMPLE SERVICES GROUP

Description: Results of WCR's and/or samples submitted for our approval.

Comments: Any questions regarding the information enclosed should be directed to your sales representative.

If there are any imperfections in transmission, please call:
(313) 824-5835.

SCI ENVIRONMENTAL, INC.



PLEASE DELIVER THIS FAX TO:

FIRM NAME: Knapheide

ATTN: Mr. Harold Huggins

FROM: Steve Townsend

SCIE PROJ. #: 90-1265

TOTAL # OF PAGES (INCL. THIS PAGE!): 7

DATE: 4-18-91 TIME: 11 Am

Please notify us IMMEDIATELY if this message is incomplete or unclear.

Thank you!!

SPECIAL MESSAGE:

Total metal analytical Results for various paint filters. Give me a call if you have any questions.

Thanks,
Steve

245 Chesterfield Industrial Boulevard • Chesterfield, Missouri 63005 • (314) 537-9901 • FAX 537-1829

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314)-434-4570 - FAX (314) 434-0080

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183801TM(42)
DATE : 04-16-91

SAMPLE MATRIX : SOLID
ATAS # : 1838.01
DATE SUBMITTED: 04-04-91
PROJECT : #91-1034-1
SAMPLE ID : 4582
SIDE ASSY

TOTAL METALS

PARAMETER	DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC 5.0	10.0	mg/Kg	ND	04-17-91	SW 6010
BARIUM 100.00	4.0	mg/Kg	1010	04-17-91	SW 6010
CADMIUM 1.0	1.0	mg/Kg	ND	04-17-91	SW 6010
CHROMIUM 5.0	1.0	mg/Kg	11.9	04-17-91	SW 6010
LEAD 5.0	4.0	mg/Kg	31.2	04-17-91	SW 6010
SILVER 5.0	2.0	mg/Kg	4.2	04-17-91	SW 6010
SELENIUM 1.0	10.0	mg/Kg	ND	04-17-91	SW 6010
MERCURY .20	0.10	mg/Kg	ND	04-17-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/Kg = PARTS PER MILLION(PPM)

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 • FAX (314) 434-0080

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183802TM(42)
DATE : 04-16-91

SAMPLE MATRIX : FILTERS
ATAS # : 1838.02
DATE SUBMITTED: 04-04-91
PROJECT : #91-1034-1
SAMPLE ID : 4583
custom

TOTAL METALS

PARAMETER	DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC 5.0	10.0	mg/Kg	ND	04-17-91	SW 6010
BARIUM 100.0	4.0	mg/Kg	7520	04-17-91	SW 6010
CADMIUM 1.0	1.0	mg/Kg	ND	04-17-91	SW 6010
CHROMIUM 5.0	1.0	mg/Kg	868	04-17-91	SW 6010
LEAD 5.0	4.0	mg/Kg	33.6	04-17-91	SW 6010
SILVER 5.0	2.0	mg/Kg	ND	04-17-91	SW 6010
SELENIUM 1.0	10.0	mg/Kg	72.4	04-17-91	SW 6010
MERCURY .20	0.10	mg/Kg	ND	04-17-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/Kg = PARTS PER MILLION(PPM)

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 · FAX (314) 434-008

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183803TM(42)

DATE : 04-16-91

SAMPLE MATRIX : FILTERS
ATAS # : 1838.03
DATE SUBMITTED: 04-04-91
PROJECT : #91-1034-1
SAMPLE ID : 4584
HOIST

TOTAL METALS

PARAMETER	DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC 5.0	10.0	mg/Kg	ND	04-17-91	SW 6010
BARIUM 100.0	4.0	mg/Kg	13000	04-17-91	SW 6010
CADMIUM 1.0	1.0	mg/Kg	1.2	04-17-91	SW 6010
CHROMIUM 5.0	1.0	mg/Kg	510	04-17-91	SW 6010
LEAD 5.0	4.0	mg/Kg	19.2	04-17-91	SW 6010
SILVER 5.0	2.0	mg/Kg	ND	04-17-91	SW 6010
SELENIUM 1.0	10.0	mg/Kg	31.4	04-17-91	SW 6010
MERCURY .20	0.10	mg/Kg	ND	04-17-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/Kg = PARTS PER MILLION(PPM)

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 · FAX (314) 434-0080

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183804TM(42)
DATE : 04-16-91

SAMPLE MATRIX : FILTERS
ATAS # : 1838.04
DATE SUBMITTED: 04-04-91
PROJECT : #91-1034-1
SAMPLE ID : 4585
PhATFORM

TOTAL METALS

PARAMETER		DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC	5.0	10.0	mg/Kg	ND	04-17-91	SW 6010
BARIUM	100.0	4.0	mg/Kg	4340	04-17-91	SW 6010
CADMIUM	1.0	1.0	mg/Kg	ND	04-17-91	SW 6010
CHROMIUM	5.0	1.0	mg/Kg	26.0	04-17-91	SW 6010
LEAD	5.0	4.0	mg/Kg	81.2	04-17-91	SW 6010
SILVER	5.0	2.0	mg/Kg	ND	04-17-91	SW 6010
SELENIUM	1.0	10.0	mg/Kg	ND	04-17-91	SW 6010
MERCURY	.20	0.10	mg/Kg	ND	04-17-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/Kg = PARTS PER MILLION(PPM)

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183805TM(42)
DATE : 04-16-91

SAMPLE MATRIX : FILTERS
ATAS # : 1838.05
DATE SUBMITTED: 04-04-91
PROJECT : #91-1034-1
SAMPLE ID : 4586
Tool Box

TOTAL METALS

PARAMETER	DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC 5.0	10.0	mg/Kg	ND	04-17-91	SW 6010
BARIUM 100.0	4.0	mg/Kg	7800	04-17-91	SW 6010
CADMIUM 1.0	1.0	mg/Kg	ND	04-17-91	SW 6010
CHROMIUM 5.0	1.0	mg/Kg	1530	04-17-91	SW 6010
LEAD 5.0	4.0	mg/Kg	1790	04-17-91	SW 6010
SILVER 5.0	2.0	mg/Kg	ND	04-17-91	SW 6010
SELENIUM 1.0	10.0	mg/Kg	109	04-17-91	SW 6010
MERCURY .20	0.10	mg/Kg	ND	04-17-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/Kg = PARTS PER MILLION(PPM)

Client: SCI ENVIRONMENTAL, INC.

Project No: 91-1034-1

Due Date: NORMAL

Report To: LIZZ COHOON

Page 1 of

Date Received: 4-4-91

Received By: ELLEN GANNON

Sample Location:

ANALYSIS

ITEM NO.	SAMPLE NO.	SAMPLE ID/ DESCRIPTION	MATRIX	SAMPLE DATE	CONTAINER/ PRESERVATIVE	TCLP MET	TOTAL RCRA											COMMENTS	DISPO NORM
1	4582	SIDE ASSEMBLY FLOOR #609 COVERS	SOLID	4-3-91	GALLON CAN	✓	✓											1838.01	
2	4583	FILTER #609 CUSTOM DEPT.	FILTERS	↓	↓	✓	✓											↓ 02	
3	4584	FILTERS #610 CUSTOM DEPT.	↓	↓	↓	✓	✓											↓ 03	
4	4585	FILTERS #611 PLATFORM DEPT.	↓	↓	↓	✓	✓											↓ 04	
5	4586	FILTERS #610 TOOL BOX DEPT.	↓	↓	↓	✓	✓											1838.05	
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			

WD 4-4-91 SWLO.BA

Items	Date	Signature Received	Analysis	Relinquished By	Relinquished By	Date	Received By
5	4-4-91 16:25	[signature]	TOTAL RCRA TCLP MET	[signature]			

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183801MT(42)

DATE : 04-16-91

SAMPLE MATRIX : SOLID
ATAS # : 1838.01
DATE SUBMITTED: 04-04-91
DATE EXTRACTED: 04-11-91
PROJECT : #91-1034-1
SAMPLE ID : 4582
SIDE ASSY

TCLP TOXICITY METALS

PARAMETER	DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC 5.0	0.05	mg/L	ND	04-11-91	SW 6010
BARIUM 100.0	0.02	mg/L	0.75	04-11-91	SW 6010
CADMIUM 1.0	0.005	mg/L	0.019	04-11-91	SW 6010
CHROMIUM 5.0	0.005	mg/L	0.038	04-11-91	SW 6010
LEAD 5.0	0.05	mg/L	0.08	04-11-91	SW 6010
SILVER 5.0	0.01	mg/L	0.02	04-11-91	SW 6010
SELENIUM 1.0	0.05	mg/L	ND	04-11-91	SW 6010
MERCURY .20	0.02	mg/L	ND	04-11-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/L = PARTS PER MILLION(PPM)

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183802MT(42)
DATE : 04-16-91

SAMPLE MATRIX : FILTERS
ATAS # : 1838.02
DATE SUBMITTED: 04-04-91
DATE EXTRACTED: 04-11-91
PROJECT : #91-1034-1
SAMPLE ID : 4583
CUSTOM

TCLP TOXICITY METALS

PARAMETER	DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC 5.0	0.05	mg/L	ND	04-11-91	SW 6010
BARIUM 100.0	0.02	mg/L	0.21	04-11-91	SW 6010
CADMIUM 1.0	0.005	mg/L	0.019	04-11-91	SW 6010
CHROMIUM 5.0	0.005	mg/L	25.9	04-11-91	SW 6010
LEAD 5.0	0.05	mg/L	0.05	04-11-91	SW 6010
SILVER 5.0	0.01	mg/L	ND	04-11-91	SW 6010
SELENIUM 1.0	0.05	mg/L	1.64	04-11-91	SW 6010
MERCURY .20	0.02	mg/L	ND	04-11-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/L = PARTS PER MILLION(PPM)

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183803MT(42)
DATE : 04-16-91

SAMPLE MATRIX : FILTERS
ATAS # : 1838.03
DATE SUBMITTED: 04-04-91
DATE EXTRACTED: 04-11-91
PROJECT : #91-1034-1
SAMPLE ID : 4584
HOIST

TCLP TOXICITY METALS

PARAMETER	DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC 5.0	0.05	mg/L	ND	04-11-91	SW 6010
BARIUM 100.0	0.02	mg/L	1.78	04-11-91	SW 6010
CADMIUM 1.0	0.005	mg/L	0.025	04-11-91	SW 6010
CHROMIUM 5.0	0.005	mg/L	24.5	04-11-91	SW 6010
LEAD 5.0	0.05	mg/L	0.06	04-11-91	SW 6010
SILVER 5.0	0.01	mg/L	0.04	04-11-91	SW 6010
SELENIUM 1.0	0.05	mg/L	1.50	04-11-91	SW 6010
MERCURY .20	0.02	mg/L	ND	04-11-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/L = PARTS PER MILLION(PPM)

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183804MT(42)
DATE : 04-16-91

SAMPLE MATRIX : FILTERS
ATAS # : 1838.04
DATE SUBMITTED: 04-04-91
DATE EXTRACTED: 04-11-91
PROJECT : #91-1034-1
SAMPLE ID : 4585
PAINT Form

TCLP TOXICITY METALS

PARAMETER	DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC 5.0	0.05	mg/L	ND	04-11-91	SW 6010
BARIUM 100.0	0.02	mg/L	2.00	04-11-91	SW 6010
CADMIUM 1.0	0.005	mg/L	0.018	04-11-91	SW 6010
CHROMIUM 5.0	0.005	mg/L	0.180	04-11-91	SW 6010
LEAD 5.0	0.05	mg/L	0.36	04-11-91	SW 6010
SILVER 5.0	0.01	mg/L	ND	04-11-91	SW 6010
SELENIUM 1.0	0.05	mg/L	ND	04-11-91	SW 6010
MERCURY .20	0.02	mg/L	ND	04-11-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/L = PARTS PER MILLION(PPM)

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 · FAX (314) 434-0080

CLIENT: SCI ENVIRONMENTAL, INC.
245 CHESTERFIELD INDUSTRIAL BLVD.
CHESTERFIELD, MO 63005
ATTN: LIZZ COHOON

REPORT: 183805MT(42)
DATE : 04-16-91

SAMPLE MATRIX : FILTERS
ATAS # : 1838.05
DATE SUBMITTED: 04-04-91
DATE EXTRACTED: 04-11-91
PROJECT : #91-1034-1
SAMPLE ID : 4586
Tool Box

TCLP TOXICITY METALS

PARAMETER	DET. LIMIT	UNIT	RESULTS	DATE ANALYZED	METHOD REFERENCE
ARSENIC 5.0	0.05	mg/L	ND	04-11-91	SW 6010
BARIUM 100.0	0.02	mg/L	0.34	04-11-91	SW 6010
CADMIUM 1.0	0.005	mg/L	0.018	04-11-91	SW 6010
CHROMIUM 5.0	0.005	mg/L	55.0	04-11-91	SW 6010
LEAD 5.0	0.05	mg/L	0.06	04-11-91	SW 6010
SILVER 5.0	0.01	mg/L	0.01	04-11-91	SW 6010
SELENIUM 1.0	0.05	mg/L	3.62	04-11-91	SW 6010
MERCURY .20	0.02	mg/L	ND	04-11-91	SW 7470

ND = NOT DETECTED ABOVE QUANTITATION LIMIT
mg/L = PARTS PER MILLION(PPM)

SCI ENVIRONMENTAL, INC

Chain-of-Custody

Page 1 of 1

Client: KNAPHEIDE MFG. CO.

Project No.: 91-1034-1

Due Date:

Report To: STEVE TOWNSEND

Date Received: 4-4-91

Received By: ELLEN GANNON

Sample Location:

ANALYSIS

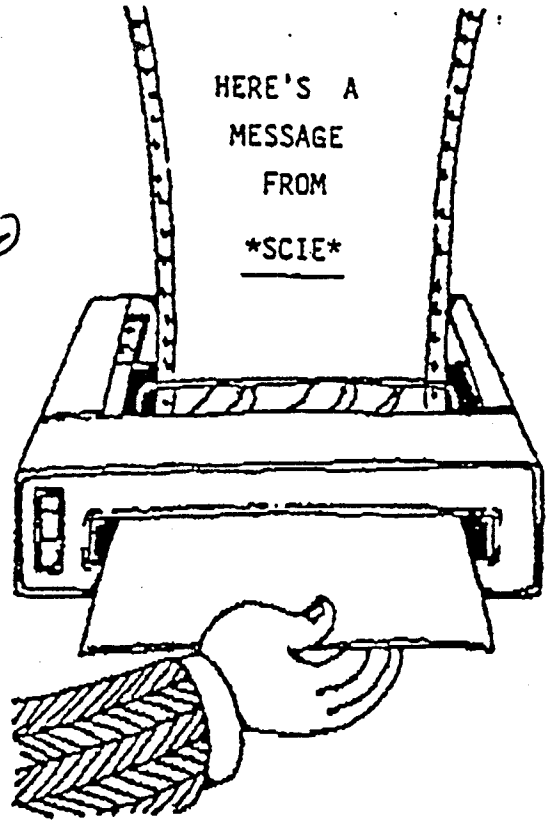
ITEM NO.	SAMPLE NO.	SAMPLE ID/ DESCRIPTION	MATRIX	SAMPLE DATE	CONTAINER/ PRESERVATIVE	TCLP MET	TOTAL RCRA											COMMENTS	DISPOSAL NORM	DISPOSAL HAZ.
1	4582	SIDE ASSEMBLY FRONT COVER #607		4-3-91	GALLON CAN	✓	✓											Sent to ATAS		
2	4583	FILTERS #609 CUSTOM DEPT.	FILTERS			✓	✓													
3	4584	FILTERS HOIST DEPT. #614				✓	✓													
4	4585	FILTERS #611 PLATFORM DEPT				✓	✓													
5	4586	FILTERS #610 TOOLBOX DEPT				✓	✓													
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				

Items	Date	Signature Received	Analysis	Relinquished By	Relinquished By	Date	Received By
5	4-4-91		TCLP MET TOTAL RCRA				

217 · 222 - 7544

SCI ENVIRONMENTAL, INC.

Gerry
for your info
AH



PLEASE DELIVER THIS FAX TO:

FIRM NAME: Knapheide

ATTN: Mr. Harold Higgins

FROM: Steve Townsend

SCIE PROJ. #: 91-1034

TOTAL # OF PAGES (INCL. THIS PAGE!): 7

DATE: 4-16-91 TIME: 1:30 +

Please notify us IMMEDIATELY if this message is incomplete or unclear.

Thank you!!

SPECIAL MESSAGE: TCLP DATA

14: Chesterfield Industrial Boulevard · Chesterfield Missouri 63005 · (314) 537-9901 · FAX 537-1829

CONTINENTAL CEMENT COMPANY

Highway 79 South • P.O. Box 71
Hannibal, MO 63401-0071
Phone 314-221-1740
Fax 314-221-1689

April 11, 1991

Orville Needer & Harold Huggins
Knapheide Manufacturing Co.
436 South Sixth, Box C140
Quincy, IL 62306

SUBJECT: Canisters, Waste Packaging

1. Following are our lab findings on your solid waste:

SAMPLE #	WASTE PRODUCTION RATE	WASTE DESCRIPTION	ENERGY VALUE
#1	1.5 drums/month	Black tar mat	6376 Btu/lb
#2	20 drums/month	Green filter	2864 Btu/lb
#3	15 drums/month	Black paint drain	12320 Btu/lb
#4	15 drums/month	Red filter dust	6271 Btu/lb
#5	3 drums/month	Red primer drain	7238 Btu/lb

2. At this point we would be unable to accept waste sample #2 (Green filter) either separately or mixed. However, the red filter dust could be removed and as such would qualify as waste sample #4. This would leave only the green filters themselves that we could not accept.

3. Following are the mixture ratios to achieve our minimum 8000 Btu/lb per container requirement:

SAMPLE #	MIXTURE PER CONTAINER
#1	Maximum 2.6 parts
#3	Minimum 3 parts
#4	Maximum 2.5 parts
#5	Maximum 5.6 parts

4. Note, no other parameters tested appear to complicate our process.

5. Your plans were to replace the green fiber filter with a paper filter. This would probably be an appropriate waste, with an expected energy of 5600 Btu/lb and with a mixture ratio of 1 part of #3 and 1.8 parts with waste.

Sincerely,

Louis Clay
Lab Manager

SCI ENVIRONMENTAL, INC. LABORATORY SERVICES DIVISION

March 12, 1991

Mr. Harold Huggins
Knapheide Manufacturing Company
436 South Sixth Street, P.O. Box C-140
Quincy, Illinois 62301

RE: Analytical Results
SCIE No. 91-1034

Dear Mr. Huggins:

SCI Environmental, Inc. (SCIE) is pleased to submit results of analytical testing performed on the samples submitted on February 18, 1991. The samples were analyzed for TCLP; EPA Method 1311 and ignitability. There were no analytical problems encountered with the analysis.

If you have any questions or need further clarification, please do not hesitate to call.

Thank you for selecting SCI Environmental for you analytical testing needs.

Respectfully submitted,

Elizabeth M. Cohoon

Elizabeth M. Cohoon
Laboratory Manager

EMC/jr/031291-2.ltr

Enclosure

245 Chesterfield Industrial Boulevard • Chesterfield, Missouri 63005 • (314) 537-9901 • FAX 537-1829

Recycled Paper

SCI ENVIRONMENTAL, INC. LABORATORY SERVICES DIVISION

DATA SUMMARY

Client: Knapheide Manufacturing Company
436 South Sixth Street, P.O. Box C-140
Quincy, Illinois 62301

Project No.: 91-1034

Sample Matrix: Filters

Date Sampled: 2/14/91
Date Received: 2/18/91
Date Analyzed: 3/4/91
EPA Method No.: 1311

Sampled By: SCIE
Sample Location: Knapheide

TOXICITY CHARACTERISTIC LEACHATE PROCEDURE (TCLP)

SCIE Sample No.: 4310

Sample Identity: Paint Composite

Contaminant	Results (ppm)*	Regulatory Level (ppm)*
Arsenic	ND(**) < 0.1	5.0
Barium	0.19	100.0
Benzene	ND < 0.1	0.5
Cadmium	ND < 0.1	1.0
Carbon tetrachloride	ND < 0.01	0.5
Chlorobenzene	ND < 0.1	100.0
Chloroform	ND < 0.1	6.0
Chromium	6.25	5.0
o-Cresol	ND < 10.0	200
m+p-Cresol	ND < 10.0	200
1,4-Dichlorobenzene	ND < 0.5	7.5
1,2-Dichloroethane	ND < 0.1	0.5
1,1-Dichloroethylene	ND < 0.1	0.7
2,4-Dinitrotoluene	ND < 0.1	0.13
Hexachlorobenzene	ND < 0.1	0.13
Hexachlorobutadiene	ND < 0.1	0.5
Hexachloroethane	ND < 0.1	3.0
Lead	ND < 0.1	5.0
Mercury	ND < 0.001	0.2
Methyl ethyl ketone	9.4	200.0
Nitrobenzene	ND < 0.5	2.0
Pentachlorophenol	ND < 10.0	100.0
Pyridine	ND < 2.0	5.0
Selenium	ND < 0.1	1.0
Silver	ND < 0.05	5.0
Tetrachloroethylene	ND < 0.1	0.7
Trichlorehthylene	ND < 0.1	0.5
2,4,5-Trichlorophenol	ND < 10.0	400.0
2,4,6-Trichlorophenol	ND < 1.0	2.0
Vinyl Chloride	ND < 0.1	0.2

* ppm = parts per million
**ND = none detected above method detection limit

Sample Number	Sample Identity	Ignitability (degrees F)
4310	Composite	> 200

Submitted By:

3/12/91
Date

Elizabeth M. Cohoon
Elizabeth M. Cohoon
Laboratory Manager

File:1034TCLP.dta

Continental Cement Company, Inc.
Hwy 79 South, P.O. Box 71
Hannibal, MO 63401 314-221-1740

EPA ID# MOCOC54013298
MO ID# RR-277 RR-188

LAB WORK SHEET

Sample ID# LSX #288
Date Received 8-23-90
Application # ____
P.O. # ____
Date ~~Sampled~~ Tested 8-27-90

Survey Reviewed By: ____

Collector/Company Contact: ____
Telephone: ____

Location of Sampling: ____
Name of Company, Disposal Site, Waste Stream, Etc.

Telephone: ____
Type of Sample: Pre-Revalidation
Collector's Field Sample No.: ____
Notes: Knockaside

Special Handling and/or Storage: ____

	Total Water %		Al2 O3%		Mn2O3%		Bromide/% Br
5.0	pH/Compatibility		CaCO3%		Na2O%	0.1	Chloride/% Cl
	Specific Gravity g/ml		CaO%		SiO2%		Fluoride/% F
4393	BTU/LB		Fe2 O3%		SO3%		Nitrate/% N
	Corrosivity		K2O%		TiO2%		Phosphate/% P
	Reactivity		MgO%				Sulfate/% S
	Free Water %						
ND	Radioactivity		Ash%		HOC/TOX		Acid Extractables
	Flashpoint (degrees F.)		Cyanide ppm		TC		Base-Neutrals
	Viscosity cP		Elemental%		THC		Organics Profile by G
	Acid/Basic %		LOI%		TIC	ND	PCBs, ppm
			Solids%		TOC		Semivolatiles, GC/MS
	METALS		Sulfide ppm		VOX		Volatile Organics, GC
	EP TOX				VOC	ND	Chlordane
	TCLP					ND	Toxaphene
ppm	Total						Pentachlorophenol

		ORGANIC CHARACTERISTICS COMPOUNDS	WASTE CODES
	Antimony		
	Arsenic		
	Barium		
54	Beryllium ppb		
	Cadmium		
	Chromium		
	Copper		
17	Lead ppm		
.83	Mercury ppb		
	Nickel		
	Osmium		
	Selenium		
	Silver		
	Titanium		
	Thallium		
	Vanadium		
	Zinc		

CK A.B.

Date: 8 28

Continental Cement Company, Inc.
Hwy 79 South, P.O. Box 71
Hannibal, MO 63401 314-221-1740

EPA ID# MOCC54013288
MO ID# AR-277 AR-138

LAB WORK SHEET

Sample ID# LSX #288A
Date Received 9-6-90
Application # —
P.O. #
Date ~~Sampled~~ Tested 9-8-90

Survey Reviewed By: _____

Collector/Company Contact: _____
Telephone: _____

Location of Sampling: _____
Name of Company, Disposal Site, Waste Stream, Etc.

Telephone: _____
Type of Sample: Pre-Qualification
Collector's Field Sample No.: _____
Notes: Kraft Bag Lipolate - Black ~~Bag~~ Film Tan Paper Mat

Special Handling and/or Storage: _____

	Total Water %		Al2 O3%		Mn2O3%		Bromide/%Br
—	pH/Compatibility		CaCO3%		Na2O%	<0.1	Chloride/%Cl
—	Specific Gravity g/ml		CaO%		SiO2%		Fluoride/%F
6376	BTU/LB		Fe2 O3%		SO3%		Nitrate/%N
	Corrosivity		K2O%		TiO2%		Phosphate/%P
	Reactivity		MgO%			0.4	Sulfate/%S
	Free Water %						
ND	Radioactivity		Ash%		HOC/TOX		Acid Extractables
	Flashpoint (degrees F.)		Cyanide ppm		TC		Base-Neutrals
	Viscosity cP		Elemental%		THC		Organics Profile by GC-i
	Acid/Basic %		LOI%		TIC	ND	PCBs, ppm
			Solids%		TOC		Semivolatiles, GC/MS
	METALS		Sulfide ppm		VOX		Volatile Organics, GC/M
	EP TOX				VOC	ND	Chlordane
	TCLP					ND	Toxaphene
PPM	Total						Pentachlorophenol

		ORGANIC CHARACTERISTICS COMPOUNDS	WASTE CODES	APE GC-
	Antimony		—	
	Arsenic			
	Barium			
4	Beryllium ppb			
	Cadmium			
	Chromium			
	Copper			
11	Lead			
16	Mercury ppb			
	Nickel			
	Osmium			
	Selenium			
	Silver			
	Titanium			
	Thallium			
	Vanadium			
	Zinc			

Reported by: C.L.

Date: 9-8-90

Continental Cement Company, Inc.
Hwy 79 South, P.O. Box 71
Hannibal, MO 63401 314-221-1740

EPA ID# MOCCS4013298
MO ID# RR-277 RR-138

LAB WORK SHEET

Sample ID# LSX # 288B
Date Received 9-6-90
Application # —
P.O. #
Date ~~Sampled~~ Tested 9-8-90

Survey Reviewed By: _____

Collector/Company Contact: _____
Telephone: _____

Location of Sampling: _____
Name of Company, Disposal Site, Waste Stream, Etc.

Telephone: _____
Type of Sample: Pre-Qualification
Collector's Field Sample No.: _____
Notes: Knopheide Update - Sheen Filter

Special Handling and/or Storage: _____

	Total Water %		Al2 O3%		Mn2O3%		Bromide/% Br
—	pH/Compatibility		CaCO3%		Na2O%	20.1	Chloride/% Cl
—	Specific Gravity g/ml		CaO%		SiO2%		Fluoride/% F
2864	BTU/LB		Fe2 O3%		SO3%		Nitrate/% N
	Corrosivity		K2O%		TiO2%		Phosphate/% P
	Reactivity		MgO%				Sulfate/% S
	Free Water %						
ND	Radioactivity		Ash%		HOC/TOX		Acid Extractables
	Flashpoint (degrees F.)		Cyanide ppm		TC		Base-Neutrals
	Viscosity cP		Elemental%		THC		Organics Profile by GC-F
	Acid/Basic %		LOI%		TIC	ND	PCBs, ppm
			Solids%		TOC		Semivolatiles, GC/MS
	METALS		Sulfide ppm		VOX		Volatile Organics, GC/MS
	EP TOX				VOC	ND	Chlordane
	TCLP					ND	Toxaphene
PPM	Total						Pentachlorophenol

		ORGANIC CHARACTERISTICS COMPOUNDS	WASTE CODES	APE/ GC-I
	Antimony		—	
	Arsenic			
	Barium			
	Beryllium ppb			
	Cadmium			
	Chromium			
	Copper			
43	Lead			
104	Mercury ppb			
	Nickel			
	Osmium			
	Selenium			
	Silver			
	Titanium			
	Thallium			
	Vanadium			
	Zinc			

Reported by: CK . AB

Date: 9-8-90

Continental Cement Company, Inc.
Hwy 79 South, P.O. Box 71
Hannibal, MO 63401 314-221-1740

EPA ID# MOCC54013288
MO ID# RR-277 RR-138

LAB WORK SHEET

Sample ID# LSX #288C
Date Received 9-6-90
Application # —
P.O. #
Date ~~Sampled~~ Tested 9-8-90

Survey Reviewed By: _____

Collector/Company Contact: _____
Telephone: _____

Location of Sampling: _____
Name of Company, Disposal Site, Waste Stream, Etc.

Telephone: _____
Type of Sample: Pre-Qualification
Collector's Field Sample No.: _____
Notes: Fluorescide Spoldte - Black Paint Drum

Special Handling and/or Storage: _____

	Total Water %		Al2 O3%		Mn2O3%		Bromide/%Br
—	pH/Compatibility		CaCO3%		Na2O%	<0.1	Chloride/%Cl
—	Specific Gravity g/ml		CaO%		SiO2%		Fluoride/%F
13320	BTU/LB		Fe2 O3%		SO3%		Nitrate/%N
	Corrosivity		K2O%		TiO2%		Phosphate/%P
	Reactivity		MgO%				Sulfate/%S
	Free Water %						
ND	Radioactivity		Ash%		HOC/TOX		Acid Extractables
	Flashpoint (degrees F.)		Cyanide ppm		TC		Base-Neutrals
	Viscosity cP		Elemental%		THC		Organics Profile by GC-F
	Acid/Basic %		LOI%		TIC	ND	PCBs, ppm
			Solids%		TOC		Semivolatiles, GC/MS
	METALS		Sulfide ppm		VOX		Volatile Organics, GC/M
	EP TOX				VOC	ND	Chlordane
	TCLP					ND	Toxaphene
PPM	Total						Pentachlorophenol

		ORGANIC CHARACTERISTICS COMPOUNDS	WASTE CODES	APE GC-
	Antimony		—	
	Arsenic			
	Barium			
	Beryllium ppb			
	Cadmium			
	Chromium			
	Copper			
20	Lead			
7	Mercury ppb			
	Nickel			
	Osmium			
	Selenium			
	Silver			
	Titanium			
	Thallium			
	Vanadium			
	Zinc			

Reported by: CK A.B.

Date: 9-8-90

Continental Cement Company, Inc.
Hwy 79 South, P.O. Box 71
Hannibal, MO 63401 314-221-1740

EPA ID# MOOC54013288
MO ID# RR-277 RR-188

LAB WORK SHEET

Sample ID# LSX # 2880
Date Received 9-6-90
Application # —
P.O. #
Date ~~Sampled~~ Tested 9-8-90

Survey Reviewed By: _____

Collector/Company Contact: _____
Telephone: _____

Location of Sampling: _____
Name of Company, Disposal Site, Waste Stream, Etc.

Telephone: _____
Type of Sample: Pre-Qualification
Collector's Field Sample No.: _____
Notes: Knapheide Update - Brick Colored Filter Paint Dust

Special Handling and/or Storage: _____

	Total Water %		Al2 O3%		Mn2O3%		Bromide/%Br
—	pH/Compatibility		CaCO3%		Na2O%	<0.1	Chloride/%Cl
—	Specific Gravity g/ml		CaO%		SiO2%		Fluoride/%F
6271	BTU/LB		Fe2 O3%		SO3%		Nitrate/%N
	Corrosivity		K2O%		TiO2%		Phospate/%P
	Reactivity		MgO%			0.8	Sulfate/%S
	Free Water %						
ND	Radioactivity		Ash%		HOC/TOX		Acid Extractables
	Flashpoint (degrees F.)		Cyanide ppm		TC		Base-Neutrals
	Viscosity cP		Elemental%		THC	ND	Organics Profile by GC-
	Acid/Basic %		LOI%		TIC		PCBs, ppm
			Solids%		TOC		Semivolatiles, GC/MS
	METALS		Sulfide ppm		VOX		Volatile Organics, GC/
	EP TOX				VOC	ND	Chlordane
	TCLP					ND	Toxaphene
PPM	Total						Pentachlorophenol

		ORGANIC CHARACTERISTICS COMPOUNDS	WASTE CODES	AP GC
	Antimony		—	
	Arsenic			
	Barium			
	Beryllium ppb			
	Cadmium			
	Chromium			
	Copper			
26	Lead			
50	Mercury ppb			
	Nickel			
	Osmium			
	Selenium			
	Silver			
	Titanium			
	Thallium			
	Vanadium			
	Zinc			

Reported by: PK

Date: 9-8-9

Continental Cement Company, Inc.
Hwy 79 South, P.O. Box 71
Hannibal, MO 63401 314-221-1740

EPA ID# MOOC54018288
MO ID# RR-277 RR-188

LAB WORK SHEET

Sample ID# LSX #288E
Date Received 9-6-90
Application # —
P.O. #
Date ~~Sampled~~ Tested 9-8-90

Survey Reviewed By: _____

Collector/Company Contact: _____
Telephone: _____

Location of Sampling: _____
Name of Company, Disposal Site, Waste Stream, Etc.

Telephone: _____
Type of Sample: Pre-Qualification
Collector's Field Sample No.: _____
Notes: Knapheide Update - Brick Colored Primer Drain

Special Handling and/or Storage: _____

	Total Water %		Al2 O3%		Mn2O3%		Bromide/% Br
—	pH/Compatibility		CaCO3%		Na2O%	<0.1	Chloride/% Cl
—	Specific Gravity g/ml		CaO%		SiO2%		Fluoride/% F
7238	BTU/LB		Fe2 O3%		SO3%		Nitrate/% N
	Corrosivity		K2O%		TiO2%		Phospate/% P
	Reactivity		MgO%				Sulfate/% S
	Free Water %						
ND	Radioactivity		Ash%		HOC/TOX		Acid Extractables
	Flashpoint (degrees F.)		Cyanide ppm		TC		Base-Neutrals
	Viscosity cP		Elemental%		THC		Organics Profile by GC
	Acid/Basic %		LOI%		TIC	ND	PCBs, ppm
			Solids%		TOC		Semivolatiles, GC/MS
	METALS		Sulfide ppm		VOX		Volatile Organics, GC/
	EP TOX				VOC	ND	Chlordane
	TCLP					ND	Toxaphene
PPM	Total						Pentachlorophenol

		ORGANIC CHARACTERISTICS COMPOUNDS	WASTE CODES	AF GC
	Antimony		—	
	Arsenic			
	Barium			
	Beryllium ppb			
	Cadmium			
	Chromium			
	Copper			
15	Lead			
267	Mercury ppb			
	Nickel			
	Osmium			
	Selenium			
	Silver			
	Titanium			
	Thallium			
	Vanadium			
	Zinc			

Reported by: CK

Date: 9-8-90

CHEM-BIO CORPORATION
ENVIRONMENTAL SERVICES
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

06/28/90 LABORATORY REPORT

H354 8451888 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 90178-H09807 NEW PAINT FILTER
DATE COLLECTED 06/21/90 DATE RECEIVED 06/27/90

TEST NAME	RESULT	UNITS
CHROMIUM - TOTAL	1.2	PPM

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

IL EPA CERTIFICATION # 100243; AIHA ACCREDITED.

N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL KK

ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

07/02/90 LABORATORY REPORT

H354 8451888 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 90178-H09807 NEW PAINT FILTER
DATE COLLECTED 06/21/90 DATE RECEIVED 06/27/90

TEST NAME	RESULT	UNITS	
CHROMIUM - TOTAL	1.2	PPM	!

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

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ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

06/28/90 LABORATORY REPORT

H354 8451888 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 90178-H09815 NEW FLOOR COVER
DATE COLLECTED 06/21/90 DATE RECEIVED 06/27/90

TEST NAME	RESULT	UNITS
CHROMIUM - TOTAL	5.2	PPM

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

IL EPA CERTIFICATION # 100243; AIHA ACCREDITED.

N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL KM

CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

ENVIRONMENTAL SERVICES

07/D2/9D LABORATORY REPORT

H354 8451888 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 9D178-HD9815 NEW FLOOR COVER
DATE COLLECTED D6/21/90 DATE RECEIVED 06/27/9D

TEST NAME	RESULT	UNITS	
CHROMIUM - TOTAL	5.2	PPM	!

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

IL EPA CERTIFICATION # 10D243; AIHA ACCREDITED.

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ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

06/28/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09815 WASTE/KRAPHEIDE/MIXED VYNOLE WASH PRIME
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS
CHROMIUM - TOTAL	2600	PPM

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL

CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

ENVIRONMENTAL SERVICES

07/03/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09815 WASTE/KRAPHEIDE/MIXED VYNOLE WASH PRIME
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS	EP RESULT		TCLP RESULT	LIMIT	
CHROMIUM - TOTAL	2600	PPM	0.84	MG/L		5.0	!

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

IL EPA CERTIFICATION # 100243; AIHA ACCREDITED.

! = REPRINT N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL KK

WI DNR LAB CERTIFICATION #241283020

FAX #414-764-0486 *CLIENT SERVICES DIRECT LINE 414-768-7460* *1-800-365-3840*

ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

06/28/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09998 WASTE/KRAPHEIDE/BLACK DIP ENAMEL/AAA0422
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS
CHROMIUM - TOTAL	0.35	PPM

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
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N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL VMC

CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

ENVIRONMENTAL SERVICES

07/02/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09998 WASTE/KRAPHEIDE/BLACK DIP ENAMEL/AAA0422
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS	
CHROMIUM - TOTAL	0.35	PPM	!

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

IL EPA CERTIFICATION # 100243; AIHA ACCREDITED.

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CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

ENVIRONMENTAL SERVICES

07/02/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09999 WASTE/KRAPHEIDE/RED DIP PRIME/FAR0001
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS	
CHROMIUM - TOTAL	4.5	PPM	!

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

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CHEM-BIO CORPORATION
ENVIRONMENTAL SERVICES
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

06/28/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09931 WASTE/KRAPHEIDE/RED DIP ENAMEL/AAR0158
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS
CHROMIUM - TOTAL	0.78	PPM

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL VAK

ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

07/02/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09931 WASTE/KRAPHEIDE/RED DIP ENAMEL/AAR0158
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS	
CHROMIUM - TOTAL	0.78	PPM	!

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

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ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

06/28/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09930 WASTE/KRAPHEIDE/SPRAY RED OXIDE/FXR0002
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS
CHROMIUM - TOTAL	3.7	PPM

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL KH

CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

ENVIRONMENTAL SERVICES

07/02/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09930 WASTE/KRAPHEIDE/SPRAY RED OXIDE/FXR0002
NO COLLECTION DATE GIVEN
DATE COLLECTEO 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS	
CHROMIUM - TOTAL	3.7	PPM	!

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

IL EPA CERTIFICATION # 100243; AIHA ACCREDITED.

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ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

06/28/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09807 WASTE/KRAPHEIDE/SPRAY GREY PRIME/FXR0007
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS
CHROMIUM - TOTAL	2.1	PPM

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL KW

CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

ENVIRONMENTAL SERVICES

07/02/90 LABORATORY REPORT

H354 8451836 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: STEVE MARSOT

SAMPLE 90177-H09807 WASTE/KRAPHEIDE/SPRAY GREY PRIME/FXR0007
NO COLLECTION DATE GIVEN
DATE COLLECTED 06/26/90 DATE RECEIVED 06/26/90

TEST NAME	RESULT	UNITS	
CHROMIUM - TOTAL	2.1	PPM	!

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT.

IL EPA CERTIFICATION # 100243; AIHA ACCREDITED.

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ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

05/18/90 LABORATORY REPORT

H354 8449940 S04

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 90130-H10002 KNAPHEIDE(W.QUINEY)PAINT FLOOR COVER(S.A)
DATE COLLECTED 05/02/90 DATE RECEIVED 05/10/90

TEST NAME	RESULT	UNITS	EP TOXICITY	EP LIMIT
BARIUM - TOTAL	100	PPM		
CADMIUM - TOTAL	1.2	PPM		
CHROMIUM - TOTAL	3.0	PPM		
COPPER - TOTAL	<0.10	PPM		
LEAD - TOTAL	7.2	PPM		
NICKEL - TOTAL	1.9	PPM		
SILVER - TOTAL	0.18	PPM		
ZINC - TOTAL	5600	PPM		
ARSENIC - TOTAL	0.23	PPM		
SELENIUM - TOTAL	<0.20	PPM		
MERCURY - TOTAL	0.020	PPM		
% CHLORINE	<0.07	%		
COLOR				
	MULTI-COLORED			
LAYERS	NONE			
ODOR	MILD			
PHYSICAL STATE	SOLID	PPM		
FREE LIQUIDS	0	%		
WATER SOLUBILITY	INSOLUBLE	PPM		
FLASH POINT (FAHRENHEIT)	>210	DEG. F		140.0
	CLOSED - CUP			
PH (UNITS)	4.8			2.0-12.5
	PH MEASURED AS SOLID IN WATER.			
SPECIFIC GRAVITY	1.16	G/ML		
TOTAL SOLIDS	93	%		
PHENOLICS	69	PPM		
TOTAL CYANIDE	<10	PPM		
REACTIVE SULFIDE	<2	PPM		

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
ANNUAL BOOKS OF ASTM STANDARDS, 1982.
PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL KK

CHEM-BIO CORPORATION
ENVIRONMENTAL SERVICES
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

05/18/90 LABORATORY REPORT

H354 8449940 S04

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 90130-H10001 KNAPHEIDE(W.QUINEY)PAINT FLOOR COVER
DATE COLLECTED 05/02/90 DATE RECEIVED 05/10/90

TEST NAME	RESULT	UNITS	EP TOXICITY	EP LIMIT
BARIUM - TOTAL	74	PPM		
CADMIUM - TOTAL	0.23	PPM		
CHROMIUM - TOTAL	52	PPM		
COPPER - TOTAL	7.8	PPM		
LEAD - TOTAL	3.2	PPM		
NICKEL - TOTAL	2.2	PPM		
SILVER - TOTAL	0.22	PPM		
ZINC - TOTAL	1500	PPM		
ARSENIC - TOTAL	0.26	PPM		
SELENIUM - TOTAL	<0.20	PPM		
MERCURY - TOTAL	<0.010	PPM		
% CHLORINE	<0.08	%		
COLOR	GREY			
LAYERS	NONE			
ODOR	MILD			
PHYSICAL STATE	SOLID	PPM		
FREE LIQUIDS	0	%		
WATER SOLUBILITY	INSOLUBLE	PPM		
FLASH POINT (FAHRENHEIT)	>210	DEG. F		140.0
	CLOSED - CUP			
PH (UNITS)	6.5			2.0-12.5
	PH MEASURED AS SOLID IN WATER.			
SPECIFIC GRAVITY	1.26	G/ML		
TOTAL SOLIDS	97	%		
PHENOLICS	7.6	PPM		
TOTAL CYANIDE	<10	PPM		
REACTIVE SULFIDE	<2	PPM		

| Dust Paint |

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
ANNUAL BOOKS OF ASTM STANDARDS, 1982.
PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL

CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

ENVIRONMENTAL SERVICES

05/18/90 LABORATORY REPORT

H354 8449940 S04

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 90130-H10004 KNAPHEIDE/COMPOSITE SAMPLE(FILTERS, DUST, FLOOR COVER)

DATE COLLECTED 05/02/90 DATE RECEIVED 05/10/90

TEST NAME	RESULT	UNITS	EP TOXICITY		EP LIMIT
BARIUM - EP			0.08	MG/L	100.0
CADMIUM - EP			0.03	MG/L	1.0
CHROMIUM - EP			6.0	MG/L	5.0
LEAD - EP			0.2	MG/L	5.0
SILVER - EP			0.02	MG/L	5.0
ARSENIC - EP			<0.010	MG/L	5.0
SELENIUM - EP			<0.020	MG/L	1.0
MERCURY - EP			<0.0004	MG/L	0.2
COPPER - EP			<0.02	MG/L	100.0
NICKEL EP			<0.06	MG/L	35.0
ZINC - EP			100	MG/L	200.0

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
SPECIFIED LIMITS ARE NOT U.S.E.P.A. REGULATED LEVELS ON CU-EP, NI-EP, ZN-EP.
PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL Y/IL

CHEM-BIO CORPORATION
ENVIRONMENTAL SERVICES
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

05/22/90 LABORATORY REPORT

H354 8449940 S04

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 90130-H10003 KNAPHEIDE(W.QUINEY)PAINT DUST
DATE COLLECTED 05/02/90 DATE RECEIVED 05/10/90

TEST NAME	RESULT	UNITS	EP TOXICITY	EP LIMIT
BARIUM - TOTAL	91	PPM		
CADMIUM - TOTAL	1.1	PPM		
CHROMIUM - TOTAL	2300	PPM		
COPPER - TOTAL	4.0	PPM		
LEAD - TOTAL	36	PPM		
NICKEL - TOTAL	2.5	PPM		
SILVER - TOTAL	0.21	PPM		
ZINC - TOTAL	43000	PPM		
ARSENIC - TOTAL	<0.10	PPM		
SELENIUM - TOTAL	<0.20	PPM		
MERCURY - TOTAL	0.023	PPM		
% CHLORINE	<0.08	%		
COLOR	GREY			
LAYERS	NONE			
ODOR	MILD			
PHYSICAL STATE	SOLID	PPM		
FREE LIQUIDS	0	%		
WATER SOLUBILITY	INSOLUBLE	PPM		
FLASH POINT (FAHRENHEIT)	>210	DEG. F		140.0
	OPEN - CUP			
PH (UNITS)	6.1			2.0-12.5
	PH MEASURED AS SOLID IN WATER.			
SPECIFIC GRAVITY	0.47	G/ML		
TOTAL SOLIDS	0.62	%		
PHENOLICS	5.4	PPM		
TOTAL CYANIDE	<10	PPM		
REACTIVE SULFIDE	<2	PPM		

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
ANNUAL BOOKS OF ASTM STANDARDS, 1982.
PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL Kik

ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

05/24/90 LABORATORY REPORT

H354 8449940 S04

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 90130-H10000 KNAPHEIDE(W.QUINCEY)PAINT FILTERS
DATE COLLECTED 05/02/90 DATE RECEIVED 05/10/90

TEST NAME	RESULT	UNITS	EP TOXICITY	EP LIMIT
BARIUM - TOTAL	550	PPM		
CADMIUM - TOTAL	0.56	PPM		
CHROMIUM - TOTAL	920	PPM		
COPPER - TOTAL	9.1	PPM		
LEAD - TOTAL	5.1	PPM		
NICKEL - TOTAL	0.50	PPM		
SILVER - TOTAL	<0.1	PPM		
ZINC - TOTAL	20000	PPM		
ARSENIC - TOTAL	0.39	PPM		
SELENIUM - TOTAL	<0.20	PPM		
MERCURY - TOTAL	0.012	PPM		
% CHLORINE	<0.08	%		
COLOR				
	MULTI-COLORED			
LAYERS	NONE			
ODOR	MILD			
PHYSICAL STATE	SOLID	PPM		
FREE LIQUIDS	0	%		
WATER SOLUBILITY		PPM		
	PARTIALLY SOLUBLE			
FLASH POINT (FAHRENHEIT)	>210	DEG. F		140.0
	OPEN - CUP			
PH (UNITS)	5.8			2.0-12.5
	PH MEASURED AS SOLID IN WATER.			
SPECIFIC GRAVITY	0.56	G/ML		
TOTAL SOLIDS	95	%		
PHENOLICS	2.4	PPM		
TOTAL CYANIDE	<10	PPM		
REACTIVE SULFIDE	<2	PPM		

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
ANNUAL BOOKS OF ASTM STANDARDS, 1982.
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N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL KM

ENVIRONMENTAL SERVICES
CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

06/21/90 LABORATORY REPORT

H354 8450691 W61

HEARTLAND ENVIRONMENTAL
424 ORLEANS
KEOKUK ,IA 52632
ATTN: GREG WILLIAMS

SAMPLE 90150-H09807 90130-H10004/KNAPHEIDE/COMPOSITE SAMPLE (FILTERS, DUST,FLOOR COVER)
DATE COLLECTED 05/02/90 DATE RECEIVED 05/30/90

TEST NAME	RESULT	UNITS	EP TOXICITY	EP LIMIT
ARSENIC-TCLP	<0.010	MG/L		
BARIUM-TCLP	0.39	MG/L		
CADMIUM-TCLP	<0.02	MG/L		
CHROMIUM-TCLP	18	MG/L		
LEAD-TCLP	0.3	MG/L		
MERCURY-TCLP	<0.0004	MG/L		
SELENIUM-TCLP	<0.020	MG/L		
SILVER-TCLP	<0.02	MG/L		
COPPER - TCLP	0.06	MG/L		
NICKEL - TCLP	<0.06	MG/L		
ZINC - TCLP	410	MG/L		
BARIUM - TOTAL	290	PPM		
CADMIUM - TOTAL	0.90	PPM		
CHROMIUM - TOTAL	190	PPM		
COPPER - TOTAL	5.0	PPM		
LEAD - TOTAL	5.7	PPM		
NICKEL - TOTAL	2.0	PPM		
SILVER - TOTAL	0.12	PPM		
ZINC - TOTAL	6800	PPM		
ARSENIC - TOTAL	0.53	PPM		
SELENIUM - TOTAL	<0.20	PPM		
MERCURY - TOTAL	<0.010	PPM		
% CHLORINE	0.17	%		
COLOR	MULTI-COLORED			
LAYERS	NONE			
ODOR	MILD			
PHYSICAL STATE	SOLID	PPM		
FREE LIQUIDS	0	%		
WATER SOLUBILITY		PPM		

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
ANNUAL BOOKS OF ASTM STANDARDS, 1982.
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N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL

Daily Analytical Laboratories
1621 W. Candlatree Drive Peoria, Illinois 61614
Tel. (309) 692-5252

Knapheide Manufacturing
436 S. 6th St. - P.O.Box C140
Quincy, IL 62306

Attn: Mr. Brice Butler

Work ID: PO# 202804
P O # :

Date Received: 10/19/89
Date of Report: 11/29/89
Work Order: 89-10-360
Job Number:
# of Samples: 6

Test	Units	#1	#2	#3	#4
Silver, Total	mg/kg	<0.37	0.45	<0.33	<0.27
Arsenic, Total	mg/kg	<3.7	<4.5	<3.3	<2.7
Barium, Total	mg/kg	8700	16000	1500	620
Cadmium, Total	mg/kg	2.3	4.5	<0.14	0.35
Chromium, Total	mg/kg	210	1800	98	150
Mercury, Total	mg/kg	<0.02	<0.02	<0.02	<0.02
Lead, Total	mg/kg	21	53	6.5	12
Selenium, Total	mg/kg	<3.7	<2.2	<3.3	<5.4
Metals Digest, nonaqueous	date of prep.	10/19/89	10/19/89	10/19/89	10/19/89
Barium, EP Toxicity	mg/l	0.09	0.03	0.17	0.14
Cadmium, EP Toxicity	mg/l	0.04	0.01		
Chromium, EP Toxicity	mg/l	4.2	33	0.03	0.23
Lead, EP Toxicity	mg/l	<0.02	<0.02	<0.02	<0.02
Selenium, EP Toxicity	mg/l	<0.01	<0.05	<0.05	<0.05
EP TOX Extraction	date of prep.	10/24/89	10/24/89	10/24/89	10/24/89
Cyanide, Total	mg/kg	<1.3	<1.1	<0.50	0.33
Paint Filter	none	Pass	Pass	Pass	Pass
Flashpoint	degrees F	>200	>200	>200	>200
Phenol	mg/kg	24	18	<2.5	<1.5
pH Nonaqueous	units	5.8	5.2	5.2	5.2
Total Sulfide	mg/kg	<3.0	4.5	<0.96	3.1

Daily Analytical Laboratories
1621 W. Candletree Drive Peoria, Illinois 61614
Tel. (309) 692-5252

 DAILY LABS REPORT Work Order # 89-10-360
Received: 10/19/89 11/29/89 11:07:45 Continued From Above

Test	Units	#1	#2	#3	#4
Total Organic Carbon	mg/kg	>160000	>140000	>160000	>260000
Extract. Organic Halogen	mg/kg	84	27	14	40
Total Solids	%w/w	96	98	99	98

Test	Units	#5	#6
Silver, Total	mg/kg	<0.33	1.2
Arsenic, Total	mg/kg	<3.3	<3.5
Barium, Total	mg/kg	8400	190
Cadmium, Total	mg/kg	0.50	<0.16
Chromium, Total	mg/kg	160	12
Mercury, Total	mg/kg	<0.02	0.11
Lead, Total	mg/kg	21	9.2
Selenium, Total	mg/kg	<3.8	<3.7
Metals Digest, nonaqueous	date of prep.	10/19/89	10/19/89
Barium, EP Toxicity	mg/l	0.11	0.20
Chromium, EP Toxicity	mg/l	0.02	<0.01
Lead, EP Toxicity	mg/l	<0.02	0.06
Selenium, EP Toxicity	mg/l	<0.05	<0.05
EP TOX Extraction	date of prep.	10/24/89	10/24/89
Cyanide, Total	mg/kg	<0.97	3.4
Paint Filter	none	Pass	Pass
Flashpoint	degrees F	>200	90
Phenol	mg/kg	<7.7	<5.5
pH Nonaqueous	units	5.8	3.8

Daily Analytical Laboratories
1621 W. Candletree Drive Peoria, Illinois 61614
Tel. (309) 692-5252

 DAILY LABS REPORT Work Order # 89-10-360
Received: 10/19/89 11/29/89 11:07:45 Continued From Above

Test	Units	#5	#6
Total Sulfide	mg/kg	<4.7	<4.5
Total Organic Carbon	mg/kg	>260000	>300000
Extract. Organic Halogen	mg/kg	20	<10
Total Solids	%w/w	95	71

Certified By: David J. Cirilli, Chemist

Daily Analytical is an IEPA certified laboratory.
All analyses are performed by methodology
acceptable to U.S. EPA and IEPA.

Daily Analytical Laboratories
1621 W. Candletree Drive Peoria, Illinois 61614
Tel. (309) 692-5252

Received: 10/19/89 11/29/89 11:07:45

Krapheide Manufacturing

Sample Identification Key

#1 - Paint Filters, Red Prime & Undercoating.

#2 - Paint Filters, Grey Paint & Primer Wash.

#3 - Flooring Covering from Grey Prime Paint Booth.

#4 - Flooring Covering from Red Prime Paint Booth.

#5 - Paper Floor Covering from UB Special.

#6 - Side Assembly Drain Boards

Resource Recovery, Inc. (Operator)
Hwy 79 South/P.O. Box 71
Hannibal, Missouri 63401
(314) 221-1740/248-0730

MO. ID#: RR-277 RR-188
Laboratory Sample No.: LSX # 112
Application #:
Invoice #:
P.O. #:

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST
LAB WASTE PROFILE WORK SHEET

PART ONE: Field Section

COLLECTOR: DATE SAMPLED TIME:

LOCATION OF SAMPLING: KNAPHEIDE MFG CO.
Name of Company, Disposal Site, Waste Stream, Etc.

ADDRESS: 436 S. SIXTH ST. QUINCY, IL TELEPHONE: 217-221-7131

TYPE OF SAMPLE: COMPANY CONTACT:

COLLECTOR'S FIELD SAMPLE NO.:

FIELD INFORMATION:

SPECIAL HANDLING AND/OR STORAGE:

DATE SAMPLED:

PART TWO: Laboratory Section

RECEIVED BY: TITLE: DATE:

___ TOTAL WATER		___ SiO_2 %		___ CYANIDE	
___ pH	6.2	___ Al_2O_3 %		___ SULFIDE	
___ SPECIFIC GRAVITY		___ Fe_2O_3 %		___ CHLORIDE	
___ BTU/LB	14473	___ CaO %		___ FLUORIDE	
___ IGNITABILITY		___ MgO %		___ SULFATE	
___ CORROSIVITY		___ SO_3 %		___ NITRATE	3.2
___ REACTIVITY		___ LOI % AFTER DRYING		___ PHOSPHATE	
___ FREE WATER		___ MOISTURE %		___ PCBs, ppm	<10 / ND
___ RADIOACTIVITY		___ SOLIDS %		___ ORGANICS PROFILE BY GC-FID	
___ FLASHPOINT		___ ASH %		___ VOLATILE ORGANICS, GC/MS	
✓ ___ TOTAL	___ E.P. TOX	___ ELEMENTAL %		___ SEMIVOLATILES, GC/MS	
	___ TCLP	___ CHLORINE %	8.8	___ ACID EXTRACTABLES	
		___ SULFUR %		___ BASE-NEUTRALS	
TITANIUM	MG/L	___ NITROGEN %	0.7		
		___ PHOSPHOROUS %			

? RERUN, EXPECT NONE 10.6 - 9/94

___ ARSENIC	
___ BARIUM	2917 check
___ CADMIUM	
___ LEAD	60
___ MERCURY	0.3
___ SELENIUM	
___ SILVER	
___ COPPER	
___ NICKEL	
___ ZINC	3025 check
___ BERYLLIUM	60 PPB
___ CHROMIUM	128
___ TOC	
___ TC	
___ TIC	
___ VOC	
___ THC	

CHARACTERISTICS COMPOUNDS	WASTE CODES	AREA % GC-FID

7-13-89
To be verified
If 8.8% pay CCC for labs chlorides
If less than 3.0% Cl
no pay to CCC.
FCS

July 13, 1989
For Barium and Zinc, Knapheide to pay CCC $200.00 per load
FCS

REPORTED BY: RP Clay DATE: 22 Jun 89

Revised 4/6/89

Groce Labs

Phone (414) 284-5746
Wisconsin 800-451-5116
Outside WI 800-338-8504
FAX (414) 284-0243

140 South Park St.
Port Washington
Wisconsin 53074

WS# 88-56
TH#
DATE: 5-16-88
SALES REP: G. Williams

I. GENERATOR INFORMATION

Name of Company: Knapheide Mfg. Co.
Facility Address: Highway 24 West
West Quincy, MO

Technical/General Contact: Steve Meckes
Title: Personnel Supervisor

US EPA ID#: MOD000766998
Name of Company: Heartland Environmental
Billing Address: 424 Orleans
Keokuk, IA 52632
Steve Marsot (219) 524-8273

Phone (217) 222-7131
Emergency Contact:
24-Hour Emergency Phone Number ( ) :

II. WASTE STREAM GENERAL INFORMATION

Waste Name: Waste Paint with Thinners

Process Producing Waste: Paint Spray Gun Clean Up

Anticipated Volume: 5 Drums Frequency: Monthly
Current Inventory: 30 Drums
Container Type: [X] Drums: ____ Weight ____ Size 55 gal.
[ ] Cube [ ] Bulk Solids [ ] Bulk Liquids [ ]

III. CHEMICAL COMPOSITION (Totals must add up to 100%)

Constituents	%
	%
Isopropyl Alcohol	1 %
Xylene	75 %
Lacquer Thinner	10 %
Paint	14 %
	%
	%
	%
	%
	%
	%

IV. PHYSICAL DESCRIPTION (Qualitative Screen)

Physical State: [X] Liquid [ ] Solid [ ] Semi-Solid [ ] Sludge [ ] Gas [ ]
Viscosity: [X] Low [ ] Medium [ ] High
Liquid Layering: [X] None [ ] Bilayered [ ] Multilayered
Color: Tan/Brown
% Solids: 5-10 % Liquids: 90-95
pH: 4-5 Specific Gravity: 1.0 g/ml
Flash Point° F: 70 % Water: <0.50
BTU/lb: 15,100 % Halogens: 1.7
Ignitability: [X] Yes [ ] No
Oxidizer: [ ] Yes [X] No Acid Reactivity: [ ] Yes [X] No
Pumpable: [X] Yes [ ] No Water Reactivity: [ ] Yes [X] No

V. METALS (mg/1 or ppm)

	Total	EP Tox		Total	EP Tox
Arsenic (As)		N/A	Copper (Cu)		N/A
Barium (Ba)			Nickel (Ni)		
Cadmium (Cd)			Zinc (Zn)		
Chromium (Cr)			Thallium (Tl)		
Lead (Pb)			Chromium Hex		
Mercury (Hg)			Other		
Selenium (Se)					
Silver (Ag)					

VI. NON-METALS (ppm or %)

Free Sulfide: <75 ppm
Free Cyanide: <50 ppm
Total Sulfide:
Total Cyanide:
PCB:

VII. SHIPPING INFORMATION (From 49-CFR)

Proper DOT Shipping Name: "RQ" Waste Paint Related Material (F003, F005)
DOT Hazard Class: Flammable Liquid UN/NA Number: NA1263 Reportable Quantity: 100

VIII. HAZARDOUS CHARACTERISTICS (From 40-CFR)

US EPA Hazardous Code(s): F003, F005
Is the Waste: [ ] Pyrophoric [ ] Dioxin Bearing [ ] Water Reactive [ ] Radioactive
[ ] Explosive [ ] Pesticides/Herbicides [ ] Biological [ ] Shock Sensitive

IX. Material Safety Data Sheet (MSDS) Available

[ ] See attached

Waste profile completed by (check one) A. ( ) generator; B. ( ) Aqua-Tech; or C. ( ) independent contractor working on behalf of the generator.

I hereby certify that I have personally examined and am familiar with the information submitted in this and all accompanying documents. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete, and that all known or suspected hazards have been disclosed. If the boxes, above, for generator or independent contractor are checked, I further certify that the waste characterization upon which Aqua-Tech relies is accurate and complete. I realize that my employer and I may be held liable under federal law, and the laws of many states, for the information provided in this form and any accompanying materials.

5/20/88 Date — Signature — Personnel Supv. Title

OFFICE COPY

Groce Labs

Phone (414) 284-5746
Wisconsin 800-451-5116
Outside WI 800-338-8504
FAX (414) 284-0243

140 South Park St.
Port Washington
Wisconsin 53074

TH# 8694
DATE: 5/16/88
SALES REP: G. William

GENERATOR INFORMATION

Name of Company Knapheide Mfg. Co.
Facility Address Highway 24 West
West Quincy, MO 63471

Technical/General Contact Steve Meckes
Title Personnel Supvr.

US EPA ID# MOD000766998
Name of Company Heartland Environmental
Billing Address 424 Orleans
Keokuk, IA 52632
Attn: Steve Marsot 219/524-82
Phone (217) 222-7131
Emergency Contact
24-Hour Emergency Phone Number ( )

II. WASTE STREAM GENERAL INFORMATION

Waste Name Waste Oil

Process Producing Waste Machine Head Cleanup

Anticipated Volume 3 dr. Frequency monthly
Current Inventory 8 dr.
Container Type [X] Drums: Weight Size 55 gal
[ ] Cube [ ] Bulk Solids [ ] Bulk Liquids [ ]

III. CHEMICAL COMPOSITION (Totals must add up to 100%)

Constituents		
Oil	90-99	%
1,1,1 Trichloroethane	1-10	%
		%
		%
		%
		%
		%
		%
		%
		%
		%

IV. PHYSICAL DESCRIPTION (Qualitative Screen)

Physical State [X] Liquid [ ] Solid [ ] Semi-Solid [ ] Sludge [ ] Gas [ ]
Viscosity [X] Low [ ] Medium [ ] High
Liquid Layering [X] None [ ] Bilayered [ ] Multilayered
Color Black
% Solids 0 % Liquids 100
pH 5-6 Specific Gravity 0.8 g/ml
Flash Point° F. 134 % Water <0.50
BTU/lb 14,100 % Halogens 3.2
Ignitability [X] Yes [ ] No
Oxidizer [ ] Yes [X] No Acid Reactivity [ ] Yes [X] No
Pumpable [X] Yes [ ] No Water Reactivity [ ] Yes [X] No

V. METALS (mg/l or ppm)

	Total	EP Tox		Total	EP Tox
Arsenic (As)	N/A	N/A	Copper (Cu)	N/A	N/A
Barium (Ba)			Nickel (Ni)		
Cadmium (Cd)			Zinc (Zn)		
Chromium (Cr)			Thallium (Tl)		
Lead (Pb)			Chromium Hex		
Mercury (Hg)			Other		
Selenium (Se)					
Silver (Ag)					

VI. NON-METALS (ppm or %)

Free Sulfide <75ppm
Free Cyanide <50ppm
Total Sulfide
Total Cyanide
PCB <50ppm

VII. SHIPPING INFORMATION (From 49-CFR)

Proper DOT Shipping Name "RQ" Waste Combustible Liquid, NOS (D001, F002)
DOT Hazard Class Combustible Liquid UN/NA Number NA1993 Reportable Quantity 1

VIII. HAZARDOUS CHARACTERISTICS (From 40-CFR)

US EPA Hazardous Code(s) F002, D001
Is the Waste [ ] Pyrophoric [ ] Dioxin Bearing [ ] Water Reactive [ ] Radioactive
[ ] Explosive [ ] Pesticides/Herbicides [ ] Biological [ ] Shock Sensitive

IX. Material Safety Data Sheet (MSDS) Available

[ ] See attached

Waste profile completed by (check one) A. ( ) generator; B. ( ) Aqua-Tech; or C. ( ) independent contractor working on behalf of the generator.

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5/20/88 Date [signature] Signature OFFICE COPY Personnel Supv. Title

Groce Labs

Phone (414) 284-5746
Wisconsin 800-451-5116
Outside WI 800-338-8504
FAX (414) 284-0243

140 South Park St.
Port Washington
Wisconsin 53074

WS# ____
TH# 9966
DATE: 2-2-89
SALES REP: G. Willia

I. GENERATOR INFORMATION

Name of Company: Knapheide Manufacturing Company
Facility Address: Highway 24 West
West Quincy, MO 63471

Technical/General Contact: Steve Meckes
Title: Personnel Supervisor

US EPA ID#: MOD000766998
Name of Company: Heartland Environmental
Billing Address: 424 Orleans
Keokuk, IA 52632
ATTN: Steve Marsot
Phone (217) 222-7131
Emergency Contact: ____
24-Hour Emergency Phone Number ( ) ____

II. WASTE STREAM GENERAL INFORMATION

Waste Name: Cooling Solution
Process Producing Waste: Roll Mill Cleaner

Anticipated Volume: 2 Drums Frequency: Weekly
Current Inventory: 55 Gallon Drum
Container Type: ☒ Drums: ____ Weight ____ Size 55 Gallo
☐ Cube ☐ Bulk Solids ☐ Bulk Liquids ☐ ____

III. CHEMICAL COMPOSITION (Totals must add up to 100%)

Constituents	%
	%
Water	55-65 %
Cleaning Compound	5-10 %
Mineral Oil	10-15 %
Kerosene	10-15 %
Dirt	< 5 %
	%
	%
	%
	%
	%

IV. PHYSICAL DESCRIPTION (Qualitative Screen)

Physical State: ☒ Liquid ☐ Solid ☐ Semi-Solid ☐ Sludge ☐ Gas ☐ ____
Viscosity: ☒ Low ☐ Medium ☐ High
Liquid Layering: ☐ None ☒ Bilayered ☐ Multilayere
Color: Gray-Cloudy/Colorless
% Solids: 0 % Liquids: 100
pH: 8 Specific Gravity: 0.9 g/ml
Flash Point° F: 155 % Water: 55-65
BTU/lb: 6,000 % Halogens: 0.24
Ignitability: ☒ Yes ☐ No
Oxidizer: ☐ Yes ☒ No Acid Reactivity: ☐ Yes ☒ N
Pumpable: ☒ Yes ☐ No Water Reactivity: ☐ Yes ☒ N

V. METALS (mg/1 or ppm)

	Total	EP Tox		Total	EP Tox
Arsenic (As)		N/A	Copper (Cu)		N/A
Barium (Ba)			Nickel (Ni)		
Cadmium (Cd)			Zinc (Zn)		
Chromium (Cr)			Thallium (Tl)		
Lead (Pb)			Chromium Hex		
Mercury (Hg)			Other		
Selenium (Se)					
Silver (Ag)					

VI. NON-METALS (ppm or %)

Free Sulfide: <75 ppm
Free Cyanide: <50 ppm
Total Sulfide: N/A
Total Cyanide: ____
PCB: ____

VII. SHIPPING INFORMATION (From 49-CFR)

Proper DOT Shipping Name: Waste Combustible Liquid, NOS
DOT Hazard Class: Combustible Liquid UN/NA Number: NA1993 Reportable Quantity: N/A

VIII. HAZARDOUS CHARACTERISTICS (From 40-CFR)

US EPA Hazardous Code(s): N/A
Is the Waste: ☐ Pyrophoric ☐ Dioxin Bearing ☐ Water Reactive ☐ Radioactive
☐ Explosive ☐ Pesticides/Herbicides ☐ Biological ☐ Shock Sensitiv

IX. Material Safety Data Sheet (MSDS) Available

☒ See attached

Waste profile completed by (check one) A. ( ) generator; B. ( ) Aqua-Tech; or C. ( ) independent contractor working on behalf of the generator.

I hereby certify that I have personally examined and am familiar with the information submitted in this and all accompanying documents. Based on my inquiry o those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete, and that all know or suspected hazards have been disclosed. If the boxes, above, for generator or independent contractor are checked, I further certify that the waste characterizatio upon which Aqua-Tech relies is accurate and complete. I realize that my employer and I may be held liable under federal law, and the laws of many states. fo the information provided in this form and any accompanying materials.

2/14/89 — Date
Stephen L Meckes — Signature
OFFICE COPY
MGR., HUM. RES. — Title

SECTION IV CORROSIVITY AND REACTIVITY DATA

STABILITY UNSTABLE STABLE X POLYMERIZATION MAY OCCUR WILL NOT OCCUR X

INCOMPATIBILITY (MATERIALS TO AVOID)

NONE

DECOMPOSITION PRODUCTS

NONE

CONDITIONS TO BE AVOIDED

NONE

SECTION VII STORAGE, HANDLING AND USE PROCEDURES

NORMAL STORAGE AND HANDLING

NO SPECIAL REQUIREMENTS

NORMAL USE

Use of this product generates dust, a very small part of which is the product itself. Use adequate ventilation. Use flood or mist coolants to control dust.

STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS

NA

WASTE DISPOSAL METHOD

Abrasives & Metals are salvageable. Dispose of accordingly.

SECTION VIII PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE) OSHA Approved respirator recommended.

VENTILATION		
	LOCAL	YES
	MECHANICAL (GENERAL)	YES
	OTHER	

PROTECTIVE GLOVES As required

EYE PROTECTION Safety glasses or goggles recommended.

OTHER EQUIPMENT

MEASURES TO BE TAKEN DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT THAT HAS BEEN IN CONTACT WITH THIS MATERIAL

N/A

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE N/A

OTHER PRECAUTIONS

FOR COMPANY USE

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof; however, W. F. Meyers Company makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.

**NAIF = NO APPLICABLE INFORMATION FOUND ***N/A = NOT APPLICABLE

CLEAR COAT

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : 219-191-906-A-00
TRADE NAME :

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	RECM LEVEL	TLV	PEL
COMMON(NA):MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: LIGROINE	1%	NOT EST	100.00 (1)	NOT EST
COMMON(NA):VM&P NAPHTHA CAS:64742-89-8 CHEMICAL: LIGROINE	1%	NOT EST	420.00 (1)	NOT EST
COMMON(NA):VM&P NAPHTHA CAS:8032-32-4 CHEMICAL: NAPHTHA	25%	NOT EST	300.00 (1)	NOT EST
COMMON(NA):N-BUTYL ALCOHOL CAS:71-36-3 CHEMICAL: 1-BUTANOL	5%	NOT EST	50.00 (1)	100.00 (1)
COMMON(NA):TOLUENE CAS:108-88-3 CHEMICAL: BENZENE, METHYL	35%	NOT EST	100.00 (1)	200.00 (1)

(1) = PPM

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 230 DEG F.
VAPOR PRESSURE MM HG AT 70 DEG F: 28.0
VAPOR DENSITY (AIR = 1.0): 5.05
SPECIFIC GRAVITY: 0.88
PERCENT VOLATILE BY VOLUME: 99.34
EVAPORATION RATE (BUTYL ACETATE = 1): 2.00
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD ***CONTINUED***

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORPTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION ****CONTINUED****
PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 870518

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

THE FURNISHING OF THE INFORMATION CONTAINED HEREIN DOES NOT CONSTITUTE A REPRESENTATION BY VALSPAR THAT ANY PRODUCT OR PROCESS IS FREE FROM PATENT INFRINGEMENT CLAIMS OF ANY THIRD PARTY OR DOES IT CONSTITUTE THE GRANTING OF A LICENSE UNDER ANY PATENT OF VALSPAR OR ANY THIRD PARTY. VALSPAR ASSUMES NO LIABILITY FOR ANY INFRINGEMENT WHICH MAY ARISE OUT OF THE USE OF THE PRODUCT.
VALSPAR WARRANTS THAT ITS PRODUCTS MEET THE SPECIFICATIONS WHICH IT SETS FOR

IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER OR FORE WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

..... END REPORT .....

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

64-AAM0014

CUSTOMER NAME : KNAPHEIDE MFG CO. CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 0641468

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAM0014-106-A-01
TRADE NAME : 64 AAM0014 GREEN METALLIC EN

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	RECM LEVEL	TLV	PEL
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: PHENYL, DIMETHYL	45%	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: LIGROINE	1%	NOT EST	100.00 (1)	NOT EST
COMMON(NA):VM&P NAPHTHA CAS:64742-89-8 CHEMICAL: LIGROINE	10%	NOT EST	420.00 (1)	NOT EST
COMMON(NA):EXEMPT MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: NAPHTHA	1%	NOT EST	100.00 (1)	NOT EST
COMMON(NA):PROPYLENE GLYCOL MONO METHYL ETHER ACETATE :108-65-6 CHEMICAL: 1-METHOXY,2-PROPANOL,ACETATE	1%	NOT EST	NOT EST	NOT EST

(1) = PPM

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 240 DEG F.
VAPOR PRESSURE MM HG AT 0 DEG F: 15.0
VAPOR DENSITY (AIR = 1.0): 5.05
SPECIFIC GRAVITY: 0.95
PERCENT VOLATILE BY VOLUME: 70.17
EVAPORATION RATE (BUTYL ACETATE = 1): .90
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 47
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 7.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

********** SECTION 9: SPECIAL PRECAUTIONS ****CONTINUED****
ISSUE DATE: 870725

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH
ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL
SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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REPRESENTATION BY VALSPAR THAT ANY PRODUCT OR PROCESS IS FREE FROM PATENT
INFRINGEMENT CLAIMS OF ANY THIRD PARTY OR DOES IT CONSTITUTE THE GRANTING OF A
LICENSE UNDER ANY PATENT OF VALSPAR OR ANY THIRD PARTY. VALSPAR ASSUMES NO
LIABILITY FOR ANY INFRINGEMENT WHICH MAY ARISE OUT OF THE USE OF THE PRODUCT.
VALSPAR WARRANTS THAT ITS PRODUCTS MEET THE SPECIFICATIONS WHICH IT SETS FOR
THEM. VALSPAR DISCLAIMS ALL OTHER WARRANTIES RELATING TO THE PRODUCTS, AND
DISCLAIMS ALL WARRANTIES RELATING TO THEIR APPLICATION, EXPRESS OR IMPLIED.
INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF
THE TERMS OF THIS WARRANTY, CONTRARY PROVISIONS OF PURCHASE ORDERS NONWITHSTAND
ING. IN THE EVENT THAT VALSPAR FINDS THAT THE PRODUCTS DELIVERED ARE
OFF-SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION, EITHER REPLACE THE
PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF, AND VALSPARS CHOICE OF ONE OF
THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUM-
STANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS
MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT
IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO
DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-328-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : NOT APPLICABLE
TRADE NAME : 64 FX90004 LOW GLOSS A/D PRIMER
REVISION DATE : 10-28-89 DATE PRINTED : 05-04-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
COMMON(NA):AROMATIC NAPHTHA	5%	TLV TWA 100.00 PPM TLV STEL NOT ESTAB OSHA PEL NOT ESTAB CEILING NOT ESTAB RECOMMD 50.00 PPM
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.		
COMMON(NA):XYLENE	35%	TLV TWA 100.00 PPM TLV STEL 150.00 PPM OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMMD NOT ESTAB
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		
COMMON(NA):ETHYLBENZENE	3%	TLV TWA 100.00 PPM TLV STEL 125.00 PPM OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMMD NOT ESTAB
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		
COMMON(NA):N-BUTYL ALCOHOL	1%	TLV TWA 50.00 PPM TLV STEL NOT ESTAB OSHA PEL NOT ESTAB CEILING 50.00 (OI) RECOMMD NOT ESTAB
CAS:71-36-3 CHEMICAL: 1-BUTANOL		

COMMON(NA):KAOLIN CAS:1332-58-7 CHEMICAL: KAOLIN	5%	TLV TWA 10.00 MG/CU M TLV STEL NOT ESTAB OSHA PEL 10.00 MG/CU M CEILING NOT ESTAB RECOMMD NOT ESTAB
COMMON(NA):BARIUM SULPHATE CAS:7727-43-7 CHEMICAL: SULFURIC ACID, BARIUM SALT	<5%	TLV TWA 10.00 MG/CU M TLV STEL NOT ESTAB OSHA PEL 10.00 MG/CU M CEILING NOT ESTAB RECOMMD NOT ESTAB
COMMON(NA):TALC CAS:14807-96-6 CHEMICAL: SILICIC ACID,MAGNESIUM SALT (1:1)	5%	TLV TWA 10.00 MG/CU M TLV STEL NOT ESTAB OSHA PEL 2.00 MG/CU M CEILING NOT ESTAB RECOMMD NOT ESTAB

********** SECTION 2: HAZARDOUS INGREDIENTS ****CONTINUED****

COMMON(NA):TITANIUM DIOXIDE	15%	TLV TWA	15.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:13463-67-7 CHEMICAL: TITANIUM OXIDE		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

(1) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 2443 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.0): 4.3
SPECIFIC GRAVITY: 1.23
PERCENT VOLATILE BY VOLUME: 68.06
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 16.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):

CAN BE ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RES-
PIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY
IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND
THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE,
KIDNEY DAMAGE.

DELAYED EFFECTS (CHRONIC):

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL
OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM
DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND
INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE,
HEARING LOSS.

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY
RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS
STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
SILICON DIOXIDE CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED
BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL,
STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING
AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW

APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. THE VALSPAR CORPORATION MAKES NO WARRANTIES EXPRESS OR IMPLIED AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA. THE VALSPAR CORPORATION FURTHER ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE TO VENDEES, USERS, OR THIRD PARTIES CAUSED BY THIS MATERIAL. SUCH VENDEES OR USERS ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THIS MATERIAL.

..... END REPORT .....

CUSTOMER NAME : KNAPHEIDE MFG. CO. CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 0650286

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAY0124-106-A-01
TRADE NAME : 64 AAY0124 KNAPHEIDE A/D YELLOW
REVISION DATE : 01-05-88

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	RECM LEVEL	TLV	PEL
COMMON(NA):MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: LIGROINE	10%	NOT EST	100.00 (1)	NOT EST
COMMON(NA):VM&P NAPHTHA CAS:64742-89-8 CHEMICAL: LIGROINE	15%	NOT EST	420.00 (1)	NOT EST
COMMON(NA):PROPYLENE GLYCOL MONO METHYL ETHER CAS:107-98-2 CHEMICAL: 1-METHOXY 2-PROPANOL	10%	NOT EST	100.00 (1)	NOT EST
COMMON(NA):ETHYLBENZENE CAS:100-41-4 CHEMICAL: BENZENE, ETHYL	5%	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: LIGROINE	5%	NOT EST	500.00 (1)	NOT EST
COMMON(NA):TITANIUM DIOXIDE CAS:13463-67-7 CHEMICAL: TITANIUM DIOXIDE	10%	NOT EST	10.00 (2)	15.00 (2)
COMMON(NA):ETHYLENE GLYCOL MONO PROPYL ETHER CAS:2807-30-9 CHEMICAL: ETHANOL,2-PROPOXY-	5%	NOT EST	NOT EST	NOT EST
COMMON(NA):TOLUENE CAS:108-88-3 CHEMICAL: PHENYL, METHYL	5%	NOT EST	100.00 (1)	200.00 (1)

(1) = PPM
(2) = MG CU M

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 230 DEG F.
VAPOR PRESSURE MM HG AT 70 DEG F: 28.0
VAPOR DENSITY (AIR = 1.0): 5.05
SPECIFIC GRAVITY: 1.06
PERCENT VOLATILE BY VOLUME: 66.92
EVAPORATION RATE (BUTYL ACETATE = 1): 2.00
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 0.90
UPPER EXPLOSIVE LIMIT : 15.80

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
CAN BE ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, CNS DEPRESSION, CORNEAL INJURY/EYE DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LUNG IRRITATION, LIVER DAMAGE, KIDNEY DAMAGE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.

********** SECTION 8; SPECIAL PROTECTION INFORMATION ****CONTINUED****
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH
ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL
SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIDLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

THE FURNISHING OF THE INFORMATION CONTAINED HEREIN DOES NOT CONSTITUTE A REPRESENTATION BY VALSPAR THAT ANY PRODUCT OR PROCESS IS FREE FROM PATENT INFRINGEMENT CLAIMS OF ANY THIRD PARTY OR DOES IT CONSTITUTE THE GRANTING OF A LICENSE UNDER ANY PATENT OF VALSPAR OR ANY THIRD PARTY. VALSPAR ASSUMES NO LIABILITY FOR ANY INFRINGEMENT WHICH MAY ARISE OUT OF THE USE OF THE PRODUCT. VALSPAR WARRANTS THAT ITS PRODUCTS MEET THE SPECIFICATIONS WHICH IT SETS FOR THEM. VALSPAR DISCLAIMS ALL OTHER WARRANTIES RELATING TO THE PRODUCTS, AND DISCLAIMS ALL WARRANTIES RELATING TO THEIR APPLICATION, EXPRESS OR IMPLIED. INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF THE TERMS OF THIS WARRANTY, CONTRARY PROVISIONS OF PURCHASE ORDERS NONWITHSTANDING. IN THE EVENT THAT VALSPAR FINDS THAT THE PRODUCTS DELIVERED ARE OFF-SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION, EITHER REPLACE THE PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF, AND VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

BLACK DIP PAINT

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAA0422-106-A-00
TRADE NAME :
ISSUE DATE : 08-01-88

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	RECM LEVEL	TLV	PEL
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL	35%	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL	5%	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):AROMATIC NAPHTHA CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM	10%	NOT EST	100.00 (1)	NOT EST
COMMON(NA):CARBON BLACK CAS:1333-86-4 CHEMICAL: CARBON BLACK	1%	NOT EST	3.50 (2)	3.50 (2)
COMMON(NA):TOLUENE CAS:108-88-3 CHEMICAL: PHENYL, METHYL	10%	NOT EST	100.00 (1)	200.00 (1)

(1) = PPM
(2) = MG CU M

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 230 DEG F.
VAPOR PRESSURE MM HG AT 70 DEG F: 28.0
VAPOR DENSITY (AIR = 1.0): 4.00
SPECIFIC GRAVITY: 0.97
PERCENT VOLATILE BY VOLUME: 70.61
EVAPORATION RATE (BUTYL ACETATE = 1): 2.00
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 47
LOWER EXPLOSIVE LIMIT : 0.70
UPPER EXPLOSIVE LIMIT : 7.10

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

********** SECTION 4: FIRE AND EXPLOSION HAZARD ****CONTINUED****

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, CNS DEPRESSION, CORNEAL INJURY/EYE DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
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VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

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..... END REPORT .....

JCP-630-02

V A L S P A R C O R P O R A T I O N

SARA SECTION 313 CHEMICAL REPORT

DATE: 02/24/90
CONTROL NO: IB0653542

CUSTOMER: THE KNAPHEIDE MFG CO
CUSTOMER NUMBER: 457210001

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
AAA0422	LF GLOSS BLK EN	H-1 H-2 P-3	A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	PCT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
1330-20-7	PHENYL,DIMETHYL	32.4	100%		YES			
100-41-4	BENZENE, ETHYL	6.6	100%	H-1 H-2 P-3	YES			
N/A	COBALT SALT OF MIXED ALIPHATIC ACIDS - SUPPLIER TRADE SECRET	0.1	025%	H-1 H-2 P-3	YES			
108-88-3	PHENYL, METHANE	11.5	100%	H-1 H-2 P-3	YES			

---------- FOOTNOTES ----------

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001
CUSTOMER INVOICE : 0653542

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAA0422-106-A-00
TRADE NAME : 64 AAA0422 LF GLOSS BLK EN
REVISION DATE : 10-28-89 DATE PRINTED : 02-24-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %		
COMMON(NA):XYLENE	30%	TLV TWA	100.00 PPM
		TLV STEL	150.00 PPM
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):ETHYLBENZENE	5%	TLV TWA	100.00 PPM
		TLV STEL	125.00 PPM
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):AROMATIC NAPHTHA	10%	TLV TWA	100.00 PPM
		TLV STEL	NOT ESTAB
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM		OSHA PEL	NOT ESTAB
H.LT. AROM		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):CARBON BLACK	1%	TLV TWA	3.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:1333-86-4 CHEMICAL: CARBON BLACK		OSHA PEL	3.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):TOLUENE	10%	TLV TWA	100.00 PPM
		TLV STEL	150.00 PPM
CAS:108-88-3 CHEMICAL: PHENYL, METHANE		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 230 DEG F.
VAPOR PRESSURE MM HG AT 70 DEG F: 28.0
VAPOR DENSITY (AIR = 1.0): 4.0
SPECIFIC GRAVITY: 0.97
PERCENT VOLATILE BY VOLUME: 70.62
EVAPORATION RATE (BUTYL ACETATE = 1): 2.0
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 47
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 9.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

********** SECTION 4: FIRE AND EXPLOSION HAZARD ****CONTINUED****

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE, KIDNEY DAMAGE, CNS DEPRESSION, CORNEAL INJURY/EYE DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:

********** SECTION 8: SPECIAL PROTECTION INFORMATION ****CONTINUED****

REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH
ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL
SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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JCP-630-02

V A L S P A R C O R P O R A T I O N

SARA SECTION 313 CHEMICAL REPORT

DATE: 01/22/90
CONTROL NO: IB0653508

CUSTOMER: THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
FXW0004	LOW GLOSS A/D PRIMER H-1 H-2 P-3		A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	PCT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT RQ	(2) HAZ SUB TPQ
78-93-3	2-BUTANONE	0.3	100%	H-1 H-2 P-3	YES			
1330-20-7	PHENYL,DIMETHYL	35.5	100%		YES			
100-41-4	BENZENE, ETHYL	7.2	100%	H-1 H-2 P-3	YES			
N/A	COBALT SALT OF MIXED ALIPHATIC ACIDS - SUPPLIER TRADE SECRET	0.1	025%	H-1 H-2 P-3	YES			
N/A	MANGANESE ALKANOATE SUPPLIER TRADE SECRET	0.1	037%	H-1 H-2 P-3	YES			
71-36-3	1-BUTANOL	1.2	100%	H-1 H-2 P-3	YES			
7727-43-7	SULFURIC ACID, BARIUM SALT	4.0	000%	H-1 H-2	YES			

---------- FOOTNOTES ----------

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001
CUSTOMER INVOICE : 0653508

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : FXH0004-106-A-00
TRADE NAME : 64 FXH0004 LDM GLOSS A/D PRIMER
REVISION DATE : 10-28-89 DATE PRINTED : 01-22-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %		
COMMON(NA):AROMATIC NAPHTHA	5%	TLV TWA	100.00 PPM
		TLV STEL	NOT ESTAB
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.		OSHA PEL	NOT ESTAB
		CEILING	NOT ESTAB
		RECOMND	50.00 PPM
COMMON(NA):XYLENE	35%	TLV TWA	100.00 PPM
		TLV STEL	150.00 PPM
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):ETHYLBENZENE	5%	TLV TWA	100.00 PPM
		TLV STEL	125.00 PPM
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):N-BUTYL ALCOHOL	1%	TLV TWA	50.00 PPM
		TLV STEL	NOT ESTAB
CAS:71-36-3 CHEMICAL: 1-BUTANOL		OSHA PEL	NOT ESTAB
		CEILING	50.00 (01)
		RECOMND	NOT ESTAB
COMMON(NA):KAOLIN	5%	TLV TWA	10.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:1332-58-7 CHEMICAL: KAOLIN		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):BARIUM SULPHATE	5%	TLV TWA	10.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:7727-43-7 CHEMICAL: SULFURIC ACID, BARIUM SALT		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):TALC	5%	TLV TWA	10.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:14807-96-6 CHEMICAL: SILICIC ACID,MAGNESIUM SA LT (1:1)		OSHA PEL	2.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):TITANIUM DIOXIDE	15%	TLV TWA	15.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:13463-67-7 CHEMICAL: TITANIUM OXIDE		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

********** SECTION 2: HAZARDOUS INGREDIENTS ****CONTINUED****

(1) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 243 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.0): 4.3
SPECIFIC GRAVITY: 1.23
PERCENT VOLATILE BY VOLUME: 68.06
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 16.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
CAN BE ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE, KIDNEY DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE, HEARING LOSS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
SILICON DIOXIDE CARBON DIOXIDE/MONOXIDE METAL OXIDES

********** SECTION 6: REACTIVITY DATA ****CONTINUED****

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA. ELIMINATE IGNITION SOURCES. REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS. AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

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V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT IDENTIFICATION

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAY0124
TRADE NAME : KNAPHEIDE AIR DRY YELLOW

SECTION 2: HAZARDOUS INGREDIENTS

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: LIGROINE	NOT EST	100.00 (1)	NOT EST
COMMON(NA):VM&P NAPHTHA CAS:8032-32-4 CHEMICAL: LIGROINE	NOT EST	420.00 (1)	NOT EST
COMMON(NA):PROPYLENE GLYCOL MONO METHYL ETHER CAS:107-98-2 CHEMICAL: 1-METHOXY 2-PROPANOL	NOT EST	NOT EST	NOT EST
COMMON(NA):ETHYLBENZENE CAS:100-41-4 CHEMICAL: BENZENE, ETHYL	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: LIGROINE	NOT EST	500.00 (1)	NOT EST
COMMON(NA):TITANIUM DIOXIDE CAS:13463-67-7 CHEMICAL: TITANIUM DIOXIDE	NOT EST	10.00 (2)	15.00 (2)
COMMON(NA):IRON OXIDE CAS:1309-37-1 CHEMICAL: CI PIGMENT YELLOW 42	NOT EST	10.00 (2)	NOT EST
COMMON(NA):ETHYLENE GLYCOL MONO PROPYL ETHER CAS:2807-30-9 CHEMICAL: ETHANOL,2-PROPOXY-	NOT EST	NOT EST	NOT EST

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

64-6AY0124

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NU : 1-800-255-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : NOT APPLICABLE
TRADE NAME : 64 AAY0124 KNAPHEIDE A/O YELLOW
REVISION DATE : 10-28-87 DATE PRINTED : 05-04-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL	20%	TLV TWA 100.00 PPM TLV STEL 150.00 PPM OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMMD NOT ESTAB
COMMON(NA):ETHYLBENZENE CAS:100-41-4 CHEMICAL: BENZENE, ETHYL	5%	TLV TWA 100.00 PPM TLV STEL 125.00 PPM OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMMD NOT ESTAB
COMMON(NA):MINERAL SPIRITS CAS:64742-47-8 CHEMICAL: DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	1%	TLV TWA 100.00 PPM TLV STEL NOT ESTAB OSHA PEL 500.00 PPM CEILING NOT ESTAB RECOMMD NOT ESTAB
COMMON(NA):VM&P NAPHTHA CAS:64742-89-8 CHEMICAL: SOLVENT NAPHTHA (PETROLEUM) LIGHT AROM.	10%	TLV TWA 420.00 PPM TLV STEL NOT ESTAB OSHA PEL NOT ESTAB CEILING NOT ESTAB RECOMMD NOT ESTAB

COMMON(NA):GENERAL SPIRITS	5%	TLV TWA	500.00 PPM
		TLV STEL	NOT ESTAB
CAS:8032-32-4 CHEMICAL: LIGROINE		OSHA PEL	300.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):TOLUENE	5%	TLV TWA	100.00 PPM
		TLV STEL	150.00 PPM
CAS:108-88-3 CHEMICAL: PHENYL, METHANE		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):TITANIUM DIOXIDE	5%	TLV TWA	15.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:13463-67-7 CHEMICAL: TITANIUM OXIDE		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

********** SECTION 2: HAZARDOUS INGREDIENTS ****CONTINUED****

COMMON(NA):ETHYLENE GLYCOL MONO PROPYL ETHER 5%

CAS:2807-30-9 CHEMICAL: ETHANOL,2-PROPOXY-

TLV TWA NOT ESTAB
TLV STEL NOT ESTAB
OSHA PEL NOT ESTAB
CEILING NOT ESTAB
RECOMMD 25.00 (01)

(1) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 230 DEG F.
VAPOR PRESSURE MM HG AT 70 DEG F: 28.9
VAPOR DENSITY (AIR = 1.0): 5.1
SPECIFIC GRAVITY: 1.09
PERCENT VOLATILE BY VOLUME: 66.99
VAPORATION RATE (BUTYL ACETATE = 1): 2.0
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 16.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC.
MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL
CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:

IMMEDIATE EFFECTS (ACUTE):

CAN BE ABSORBED THROUGH THE SKIN.

HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.

OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE, KIDNEY DAMAGE, CNS DEPRESSION, CORNEAL INJURY/EYE DAMAGE.

DELAYED EFFECTS (CHRONIC):

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE.

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY
RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS
STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORPTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED
BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL,
STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR REGONDITIONED.

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; N-OSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTENS; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : KNAPHEIDE MFG CO CUSTOMER NUMBER: 45721CCCC
CUSTOMER INVOICE : 0641095

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAL0190-106-A-00
TRADE NAME : 64 AAL0190 NEW BLUE

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	RECM LEVEL	TLV	PEL
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: BENZENE, DIMETHYL	35%	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):AROMATIC NAPHTHA CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM	15%	NOT EST	100.00 (1)	NOT EST
COMMON(NA):TITANIUM DIOXIDE CAS:13463-67-7 CHEMICAL: TITANIUM DIOXIDE	1%	NOT EST	10.00 (2)	15.00 (2)
COMMON(NA):COPPER PHTHALOCYANINE BLUE CAS: CHEMICAL: TRADE SECRET	1%	NOT EST	NOT EST	1.00 (2)
COMMON(NA):VM&P NAPHTHA CAS:64742-89-8 CHEMICAL: LIGROINE	10%	NOT EST	420.00 (1)	NOT EST

1) = PPM
2) = MG CU M

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 240 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 15.0
VAPOR DENSITY (AIR = 1.0): 4.00
SPECIFIC GRAVITY: 0.96
PERCENT VOLATILE BY VOLUME: 69.21
EVAPORATION RATE (BUTYL ACETATE = 1): .90
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 0.70
UPPER EXPLOSIVE LIMIT : 7.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

ERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

SPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 870508

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH

********** SECTION 9: SPECIAL PRECAUTIONS ****CONTINUED****
MINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL
ETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
B-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
CC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

THE FURNISHING OF THE INFORMATION CONTAINED HEREIN DOES NOT CONSTITUTE A REPRESENTATION BY VALSPAR THAT ANY PRODUCT OR PROCESS IS FREE FROM PATENT INFRINGEMENT CLAIMS OF ANY THIRD PARTY OR DOES IT CONSTITUTE THE GRANTING OF A LICENSE UNDER ANY PATENT OF VALSPAR OR ANY THIRD PARTY. VALSPAR ASSUMES NO LIABILITY FOR ANY INFRINGEMENT WHICH MAY ARISE OUT OF THE USE OF THE PRODUCT. VALSPAR WARRANTS THAT ITS PRODUCTS MEET THE SPECIFICATIONS WHICH IT SETS FOR THEM. VALSPAR DISCLAIMS ALL OTHER WARRANTIES RELATING TO THE PRODUCTS, AND DISCLAIMS ALL WARRANTIES RELATING TO THEIR APPLICATION, EXPRESS OR IMPLIED. INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF THE TERMS OF THIS WARRANTY, CONTRARY PROVISIONS OF PURCHASE ORDERS NONWITHSTANDING. IN THE EVENT THAT VALSPAR FINDS THAT THE PRODUCTS DELIVERED ARE OFF-SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION, EITHER REPLACE THE PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF, AND VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

JCP-630-02

THE VALSPAR CORPORATION

SARA SECTION 313 CHEMICAL REPORT

DATE: 02/15/89
CONTROL NO: IB4225908

CUSTOMER: THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
990T004	48 QTS	H-1 H-2 P-3	A	Y

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	PCT WT.	VOL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
7664-38-2	PHOSPHORIC ACID	15.9	025%	H-1 H-2	Y			

FOOTNOTES

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 4225908

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : 990T004-142-A-00
TRADE NAME : 70 990T004 46 QTS
REVISION DATE : 02-03-89

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %		
COMMON(NA):PHOSPHORIC ACID	15%	TLV TWA	1.00 MG CU M
		TLV STEL	3.00 MG CU M
CAS:7664-38-2 CHEMICAL: PHOSPHORIC ACID		OSHA PEL	1.00 MG CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):ISOPROPYL ALCOHOL	65%	TLV TWA	400.00 PPM
		TLV STEL	500.00 PPM
CAS:67-63-0 CHEMICAL: 2-PROPANOL		OSHA PEL	400.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 177 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 33.0
VAPOR DENSITY (AIR = 1.0): 2.1
SPECIFIC GRAVITY: 0.92
PERCENT VOLATILE BY VOLUME: 92.56
EVAPORATION RATE (BUTYL ACETATE = 1): 1.7
SOLUBILITY IN WATER: YES
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 55
LOWER EXPLOSIVE LIMIT : 3.00
UPPER EXPLOSIVE LIMIT : 12.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
EYE IRRITATION.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE PHOSPHORUS OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

********** SECTION 9: SPECIAL PRECAUTIONS ****CONTINUED****

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH
ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL
SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

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V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-225-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : NOT APPLICABLE
TRADE NAME : 64 FX60001 FLEET GRN L/F PRIMER
REVISION DATE : 06 27-87 DATE PRINTED : 05-04-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
COMMON(NA):AROMATIC NAPHTHA	5%	TLV TWA 100.00 PPM TLV STEL NOT ESTAB OSHA PEL NOT ESTAB CEILING NOT ESTAB RECOMMD 50.00 PPM
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.		
COMMON(NA):XYLENE	20%	TLV TWA 100.00 PPM TLV STEL 150.00 PPM OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMMD NOT ESTAB
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		
COMMON(NA):ETHYLBENZENE	5%	TLV TWA 100.00 PPM TLV STEL 125.00 PPM OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMMD NOT ESTAB
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		
COMMON(NA):KAOLIN	5%	TLV TWA 10.00 MG/CU M TLV STEL NOT ESTAB OSHA PEL 10.00 MG/CU M CEILING NOT ESTAB RECOMMD NOT ESTAB
CAS:1332-58-7 CHEMICAL: KAOLIN		

COMMON(NA):BARIUM SULPHATE	[illegible]	TLV TWA	10.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:7727-43-7 CHEMICAL: SULFURIC ACID, BARIUM SALT		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):XYLENE	20%	TLV TWA	100.00 PPM
		TLV STEL	150.00 PPM
CAS:1330-20-7 CHEMICAL: PHENYL,D'METHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):TITANIUM DIOXIDE	5%	TLV TWA	15.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:13463-67-7 CHEMICAL: TITANIUM OXIDE		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

********** SECTION 2: HAZARDOUS INGREDIENTS ****CONTINUED****

COMMON(NA):N-BUTYL ALCOHOL 1% TLV TWA 50.00 PPM
TLV STEL NOT ESTAB
OSHA PEL NOT ESTAB
CEILING 50.00 (O1)
RECOMND NOT ESTAB

CAS#:71-36-3 CHEMICAL: 1-BUTANOL

(1) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 243 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.0): 4.3
SPECIFIC GRAVITY: 1.15
PERCENT VOLATILE BY VOLUME: 48.55
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 14.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):

CAN BE ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
CONTAINS INGREDIENTS WHICH HAVE BEEN SHOWN (ON LABORATORY ANIMALS) TO CAUSE LIVER AND KIDNEY DAMAGE.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE
NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE, KIDNEY DAMAGE.

DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE, HEARING LOSS.

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY
RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS
STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED
BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL,
STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING

AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVELS; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. THE VALSPAR CORPORATION MAKES NO WARRANTIES EXPRESS OR IMPLIED AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA. THE VALSPAR CORPORATION FURTHER ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE TO VENDEES, USERS, OR THIRD PARTIES CAUSED BY THIS MATERIAL. SUCH VENDEES OR USERS ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THIS MATERIAL.

..... END REPORT .....

JCP-630-02

V A L S P A R C O R P O R A T I O N

SARA SECTION 313 CHEMICAL REPORT

DATE: 03/25/90
CONTROL NO: IB0653066

CUSTOMER: THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
FAR0001	L.F. RED OXIDE DIP P H-1 H-2 P-3		A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	PCT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
1330-20-7	PHENYL,DIMETHYL	38.8	100%		YES			
100-41-4	BENZENE, ETHYL	7.9	100%	H-1 H-2 P-3	YES			

FOOTNOTES

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001
CUSTOMER INVOICE : 0653066

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : FAR0001-106-A-03
TRADE NAME : 64 FAR0001 L.F. RED OXIDE DIP P
REVISION DATE : 10-28-89 DATE PRINTED : 03-25-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %		
COMMON(NA):XYLENE	40%	TLV TWA	100.00 PPM
		TLV STEL	150.00 PPM
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):ETHYLBENZENE	10%	TLV TWA	100.00 PPM
		TLV STEL	125.00 PPM
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):KAOLIN	5%	TLV TWA	10.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:1332-58-7 CHEMICAL: KAOLIN		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):SILICA	10%	TLV TWA	10.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:7631-86-9 CHEMICAL: SILICA		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(1):SILICON DIOXIDE	< 1%	TLV TWA	0.10 MG/CU M
		TLV STEL	NOT ESTAB
CAS:14808-60-7 CHEMICAL: QUARTZ		OSHA PEL	0.10 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):IRON OXIDE	10%	TLV TWA	NOT ESTAB
		TLV STEL	NOT ESTAB
CAS:1309-37-1 CHEMICAL:		OSHA PEL	5.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):AROMAITC NAPHTHA	1%	TLV TWA	100.00 PPM
		TLV STEL	NOT ESTAB
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.		OSHA PEL	NOT ESTAB
		CEILING	NOT ESTAB
		RECOMND	50.00 PPM

(1) * THIS MATERIAL IS A CARCINOGEN PER IARC

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 277 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.0): 4.3
SPECIFIC GRAVITY: 1.17
PERCENT VOLATILE BY VOLUME: 66.01
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

********** SECTION 3: PHYSICAL DATA ********** ****CONTINUED****
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 80
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 7.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE, KIDNEY DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
SILICON DIOXIDE PHENOLICS CARBON DIOXIDE/MONOXIDE
METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

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V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

64-FX00003

********** SECTION 1: PRODUCT IDENTIFICATION **********

ANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
FO TELEPHONE NUMBER : (612) 332-7371
4 HR EMERGENCY PHONE NO : 1-800-328-5635
HEMICAL NAME OR FAMILY : PAINT PRODUCT
ORMULA : NOT APPLICABLE
RADE NAME : 64 FX00003 WHITE EPO ESTER PRAR
EVISION DATE : 10-28-89 DATE PRINTED : 05-04-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
DAMON(NA):KAOLIN	1%	TLV TWA 10.00 MG/CU M
		TLV STEL NOT ESTAB
AS:1332-58-7 CHEMICAL: KAOLIN		OSHA PEL 10.00 MG/CU M
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
DAMON(NA):BARIUM SULPHATE	5%	TLV TWA 10.00 MG/CU M
		TLV STEL NOT ESTAB
AS:7727-43-7 CHEMICAL: SULFURIC ACID, BARIUM SALT		OSHA PEL 10.00 MG/CU M
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
DAMON(NA):TITANIUM DIOXIDE	15%	TLV TWA 15.00 MG/CU M
		TLV STEL NOT ESTAB
AS:13463-67-7 CHEMICAL: TITANIUM OXIDE		OSHA PEL 10.00 MG/CU M
		CEILING NOT ESTAB
		RECOMND NOT ESTAB
DAMON(NA):XYLENE	35%	TLV TWA 100.00 PPM
		TLV STEL 150.00 PPM
AS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		OSHA PEL 100.00 PPM
		CEILING NOT ESTAB
		RECOMND NOT ESTAB

COMMON(NA):ETHYLBENZENE	5%	TLV TWA	100.00 PPM
		TLV STEL	125.00 PPM
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):N-BUTYL ALCOHOL	1%	TLV TWA	50.00 PPM
		TLV STEL	NOT ESTAB
CAS:71-36-3 CHEMICAL: 1-BUTANOL		OSHA PEL	NOT ESTAB
		CEILING	50.00 (O1)
		RECOMND	NOT ESTAB
COMMON(NA):AROMATIC NAPHTHA	5%	TLV TWA	100.00 PPM
		TLV STEL	NOT ESTAB
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.		OSHA PEL	NOT ESTAB
		CEILING	NOT ESTAB
		RECOMND	50.00 PPM

********** SECTION 2: HAZARDOUS INGREDIENTS ****CONTINUED****

1) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 243 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.0): 6.3
SPECIFIC GRAVITY: 1.20
PERCENT VOLATILE BY VOLUME: 66.58
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 7.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
CAN BE ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE,

KIDNEY DAMAGE.

DELAYED EFFECTS (CHRONIC):

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE, HEARING LOSS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:

IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.

INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE METAL OXIDES SULFUR OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED
BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

ROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
YE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
THER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

RECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE.

JCP-630-02

V A L S P A R C O R P O R A T I O N

SARA SECTION 313 CHEMICAL REPORT

DATE: 02/24/90
CONTROL NO: IB0653380

CUSTOMER: THE KNAPHEIDE MFG CO
CUSTOMER NUMBER: 457210001

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
FXW0003	WHITE EPO ESTER PRMR	H-1 H-2 P-3	A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME		PCT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
N/A	COBALT SALT OF MIXED ALIPHATIC ACIDS - SUPPLIER TRADE SECRET		0.1	025%	H-1 H-2 P-3	YES			
N/A	MANGANESE ALKANOATE	SUPPLIER TRADE SECRET	0.1	037%	H-1 H-2 P-3	YES			
7727-43-7	SULFURIC ACID, BARIUM	SALT	4.9	000%	H-1 H-2	YES			
1330-20-7	PHENYL,DIMETHYL		34.8	100%		YES			
100-41-4	BENZENE, ETHYL		7.1	100%	H-1 H-2 P-3	YES			
71-36-3	1-BUTANOL		1.4	100%	H-1 H-2 P-3	YES			
78-93-3	2-BUTANONE		0.3	100%	H-1 H-2 P-3	YES			

FOOTNOTES

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001
CUSTOMER INVOICE : 0653380

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : FXH0003-106-A-00
TRADE NAME : 64 FXH0003 WHITE EPD ESTER PRMR
REVISION DATE : 10-28-89 DATE PRINTED : 02 24-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %		
COMMON(NA):KAOLIN	1%	TLV TWA	10.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:1332-58-7 CHEMICAL: KAOLIN		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):BARIUM SULPHATE	5%	TLV TWA	10.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:7727-43-7 CHEMICAL: SULFURIC ACID, BARIUM SALT		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):TITANIUM DIOXIDE	15%	TLV TWA	15.00 MG/CU M
		TLV STEL	NOT ESTAB
CAS:13463-67-7 CHEMICAL: TITANIUM OXIDE		OSHA PEL	10.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):XYLENE	35%	TLV TWA	100.00 PPM
		TLV STEL	150.00 PPM
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):ETHYLBENZENE	5%	TLV TWA	100.00 PPM
		TLV STEL	125.00 PPM
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		OSHA PEL	100.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):N-BUTYL ALCOHOL	1%	TLV TWA	50.00 PPM
		TLV STEL	NOT ESTAB
CAS:71-36-3 CHEMICAL: 1-BUTANOL		OSHA PEL	NOT ESTAB
		CEILING	50.00 (01)
		RECOMND	NOT ESTAB
COMMON(NA):AROMATIC NAPHTHA	5%	TLV TWA	100.00 PPM
		TLV STEL	NOT ESTAB
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.		OSHA PEL	NOT ESTAB
		CEILING	NOT ESTAB
		RECOMND	50.00 PPM

(1) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 243 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.0): 4.3
SPECIFIC GRAVITY: 1.20
PERCENT VOLATILE BY VOLUME: 66.58
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

********** SECTION 3: PHYSICAL DATA ********** ****CONTINUED****
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 7.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
CAN BE ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE, KIDNEY DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE, HEARING LOSS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE METAL OXIDES SULFUR OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

•••••••••••••••••••• SECTION 7: SPILL OR LEAK PROCEDURES ••••CONTINUED••••

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

•••••••••••••••••••• SECTION 8: SPECIAL PROTECTION INFORMATION ••••••••••••••••••

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

•••••••••••••••••••• SECTION 9: SPECIAL PRECAUTIONS ••••••••••••••••••

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

•••••••••••••••••••• DISCLAIMER SECTION ••••••••••••••••••

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V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

USTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000
STOMER INVOICE : 0639432

********** SECTION 1: PRODUCT IDENTIFICATION **********

ANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
LEPHONE NUMBER : (612) 332-7371
EMICAL NAME OR FAMILY : PAINT PRODUCT
RMULA : AAA0341-106-A-01
RADE NAME : 64 AAA0341 . KNAPHEIDE GLOSS BLL

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	RECM LEVEL	TLV	PEL
MON(NA):MINERAL SPIRITS :8032-32-4 CHEMICAL: LIGROINE	NOT EST	100.00 (1)	NOT EST
OMMON(NA):VM&P NAPHTHA :8032-32-4 CHEMICAL: LIGROINE	NOT EST	420.00 (1)	NOT EST
OMMON(NA):PROPYLENE GLYCOL MONO METHYL ETHER AS:107-98-2 CHEMICAL: 1-METHOXY 2-PROPANOL	NOT EST	NOT EST	NOT EST
MON(NA):ETHYLBENZENE :100-41-4 CHEMICAL: BENZENE, ETHYL	NOT EST	100.00 (1)	100.00 (1)
OMMON(NA):MINERAL SPIRITS :8032-32-4 CHEMICAL: LIGROINE	NOT EST	500.00 (1)	NOT EST
OMMON(NA):CARBON BLACK AS 'NKNOWN CHEMICAL: CARBON BLACK	NOT EST	3.50 (2)	3.50 (2)
MON(NA):ETHYLENE GLYCOL MONO PROPYL ETHER AS:2807-30-9 CHEMICAL: ETHANOL,2-PROPOXY-	NOT EST	NOT EST	NOT EST
OMMON(NA):TOLUENE :108-88-3 CHEMICAL: BENZENE, METHYL	NOT EST	100.00 (1)	200.00 (1)

1) = PPM
= MG CU M

********** SECTION 3: PHYSICAL DATA **********

OILING POINT: 230 DEG F.
APOR PRESSURE MM HG AT 68 DEG F: 28.0
APOR DENSITY (AIR = 1.0): 5.05
PECIFIC GRAVITY: 0.94
ERCENT VOLATILE BY VOLUME: 69.97
VAPORATION RATE (BUTYL ACETATE = 1): 2.00
OLUBILITY IN WATER: NO
PPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

LASH POINT TCC/PM DEG F : 45
OWER EXPLOSIVE LIMIT : 0.90
PPER EXPLOSIVE LIMIT : 15.80

XTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

PECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

SUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC.
MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL
CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

HRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

MERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, GIVING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

********** SECTION 9: SPECIAL PRECAUTIONS ****CONTINUED****

OTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 860724

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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MATERIAL SAFETY DATA SH

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : K260006-106-A-02
TRADE NAME :

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	REGA LEVEL	TLV	PEL
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: BENZENE, DIMETHYL	20%	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):PROPYLENE GLYCOL MONO METHYL ETHER ACETATE CAS:108-65-6 CHEMICAL: 1-METHOXY,2-PROPANOL,ACETATE	20%	NOT EST	NOT EST	NOT EST
COMMON(NA):TITANIUM DIOXIDE CAS:13463-67-7 CHEMICAL: TITANIUM DIOXIDE	25%	NOT EST	10.00 (2)	15.00 (2)
COMMON(NA):DIISOBUTYL KETONE CAS:108-83-8 CHEMICAL: 4-HEPTANONE, 2,6-DIMETHYL-	5%	NOT EST	25.00 (1)	50.00 (1)
COMMON(NA):AROMATIC NAPHTHA CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.	10%	NOT EST	100.00 (1)	NOT EST

(1) = PPM
(2) = MG CU M

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 282 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 6.0
VAPOR DENSITY (AIR = 1.0): 4.90
SPECIFIC GRAVITY: 1.19
PERCENT VOLATILE BY VOLUME: 67.47
EVAPORATION RATE (BUTYL ACETATE = 1): .61
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

**** ********** SECTION 4: FIRE AND EXPLOSION HAZARD ***CONTINUED***

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: ANY
RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS
STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORPTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF CONTAINED
BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT TCC/PM DEG F : 80
LOWER EXPLOSIVE LIMIT : 0.80
UPPER EXPLOSIVE LIMIT : 7.10

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

**** ********** SECTION 8: SPECIAL PROTECTION INFORMATION ****CONTINUED****

VENTILATION:

REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 870331

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG/CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

[illegible]D AFTER [illegible] UNLESS AIR MONITOR[illegible] ARE BELOW
[illegible]LICABLE LIMITS. FOLLOW RESPIRATOR MANUF[illegible]URERS DIRECTIONS FOR
RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

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ISSUE DATE: 850403

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

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[redacted] VALSPAR [redacted] WARRANTS [redacted] ITS PRODUCTS MEET THE SPECIFICATIONS WITH IT SETS FORTH [redacted] THEREIN. VALSPAR DISCLAIMS ALL OTHER WARRANTIES, RELATING TO THE PRODUCTS, AND DISCLAIMS ALL WARRANTIES RELATING TO THEIR APPLICATION, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF THE TERMS OF THIS WARRANTY, CONTRARY PROVISIONS OF PURCHASE ORDERS NONWITHSTANDING. IN THE EVENT THAT VALSPAR FINDS THAT THE PRODUCTS DELIVERED ARE OFF-SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION, EITHER REPLACE THE

PROD[illegible]TS OR REFUND THE PURCHASE PRICE THEREOF, [illegible]D VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

..... END REPORT .....

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT IDENTIFICATION

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : CTC0036-106-A C2
TRADE NAME :

SECTION 2: HAZARDOUS INGREDIENTS

NAME	APPROX WT %	REGM LEVEL	TLV	PEL
COMMON(NA):URETHANE PREPOLYMER CAS:822-06-0 CHEMICAL: HEXANE, 1,6-DIISOCYANATO, PREPOLYMER	75%	NOT EST	NOT EST	NOT EST
COMMON(NA):BUTYL ACETATE CAS:123-86-4 CHEMICAL: ACETIC ACID, BUTYL ESTER	10%	NOT EST	150.00 (1)	150.00 (1)
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: BENZENE, DIMETHYL	10%	NOT EST	100.00 (1)	100.00 (1)

(1) - PPM

SECTION 3: PHYSICAL DATA

BOILING POINT: 259 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 8.0
VAPOR DENSITY (AIR = 1.0): 4.00
SPECIFIC GRAVITY: 1.06
PERCENT VOLATILE BY VOLUME: 30.00
EVAPORATION RATE (BUTYL ACETATE = 1): 1.00
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

SECTION 4: FIRE AND EXPLOSION DATA

FLASH POINT TCC/PM DEG F : 91
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 7.60

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

[redacted] IT[redacted]ERS[redacted]POS[redacted] TO[redacted]RE [redacted]OULD[redacted]E K[redacted] WI[redacted]NATE[redacted]

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:

NONE

********** SECTION 5: HEALTH HAZARD **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
EYE IRRITATION.
REDNESS OR DRYNESS OF SKIN.
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.
POSSIBLE SENSITIZATION.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT: WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION
REMOVE CONTAMINATED CLOTHING AND CLEAN BEFORE REUSE.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBATION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
NITROGEN OXIDES CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING

[redacted] PL[redacted]BL[redacted]IMIT[redacted] [redacted]LOW [redacted]SPI[redacted]TOR[redacted] [redacted] DI[redacted]TI[redacted] FO[redacted] [redacted]
RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES.

**** ********** SECTION 8: SPECIAL PROTECTIVE INFORMATION ****CONTINUED****

PROTECTIVE GLOVES: NEOPRENE OR OTHER NONPOROUS.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: NEOPRENE OR PLASTIC APRON AND PROTECTIVE CLOTHING COVERING EXPOSED SKIN AREAS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

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ISSUE DATE: 860701

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

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PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR [illegible] AN[illegible] THE [illegible]MS OF THIS WARRANTY. CONTRARY PROVISIONS [illegible] PURCHASE ORDERS NOTWITHSTANDING. [illegible]N THE EVENT THAT VALSPAR FINDS THAT THE PRODUCTS DELIVERED ARE OFF-SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION, EITHER REPLACE THE PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF, AND VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT

[redacted] ** [redacted] ** [redacted] ** [redacted] ** [redacted] ISO [redacted] NE [redacted] ECT [redacted] CONTINUED [redacted]

IS R[illegible]ONABLY ABLE TO DO SO, BUT VALSPAR SHA[illegible] NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : KNAPHEIDE MFG. CO. CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 0640697

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : 8AA2530-106-A-02
TRADE NAME : 64 8AA2530 SPRAY FILLER

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	RECM LEVEL	TLV	PEL
COMMON(NA):XYLENE	15%	NOT EST	100.00 (1)	100.00 (1)
CAS:1330-20-7 CHEMICAL: BENZENE, DIMETHYL				
COMMON(NA):TITANIUM DIOXIDE	5%	NOT EST	10.00 (2)	15.00 (2)
CAS:13463-67-7 CHEMICAL: TITANIUM DIOXIDE				
COMMON(NA):AROMATIC NAPHTHA	15%	NOT EST	100.00 (1)	NOT EST
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.				

(1) = PPM
(2) = MG CU M

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 282 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 6.0
VAPOR DENSITY (AIR = 1.0): 4.30
SPECIFIC GRAVITY: 1.49
PERCENT VOLATILE BY VOLUME: 51.42
EVAPORATION RATE (BUTYL ACETATE = 1): .61
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 81
LOWER EXPLOSIVE LIMIT : 0.90
UPPER EXPLOSIVE LIMIT : 6.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****
SIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

TILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

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ISSUE DATE: 850403

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
CF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

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V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

TOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000
TOMER INVOICE : 0639560

********** SECTION 1: PRODUCT IDENTIFICATION **********

ANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
ELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
ORMULA : FXR0002-106-A-02
RADE NAME : 64 FXR0002 RED OXIDE PRIMER

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: BENZENE, DIMETHYL	NOT EST	100.00 (1)	100.00 (1)
OMMON(NA):AROMATIC NAPHTHA CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),L T. AROM.	NOT EST	100.00 (1)	NOT EST
OMMON(NA):KAOLIN CAS: 1332-58-7 CHEMICAL: KAOLIN	NOT EST	10.00 (2)	15.00 (2)
OMMON(NA):TALC CAS:UNKNOWN CHEMICAL: SILICIC ACID,MAGNESIUM SALT (1:1)	NOT EST	10.00 (2)	20.00 (3)
OMMON(NA):IRON OXIDE CAS:UNKNOWN CHEMICAL: IRON OXIDE	NOT EST	NOT EST	10.00 (2)
MON(NA):N-BUTYL ALCOHOL :71-36-3 CHEMICAL: 1-BUTANOL	NOT EST	50.00 (1)	100.00 (1)

(1) = PPM
(2) = MG CU M
(3) = MPPCF

********** SECTION 3: PHYSICAL DATA **********

OILING POINT: 243 DEG F.
APOR PRESSURE MM HG AT 68 DEG F: 6.0
VAPOR DENSITY (AIR = 1.0): 4.30
SPECIFIC GRAVITY: 1.17
ERCENT VOLATILE BY VOLUME: 67.31
VAPORATION RATE (BUTYL ACETATE = 1): .61
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 0.90
PPER EXPLOSIVE LIMIT : 6.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

PECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

NUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

SECTION 5: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

SECTION 6: REACTIVITY DATA

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
SILICON DIOXIDE CARBON DIOXIDE/MONOXIDE METAL OXIDES
SULFUR OXIDES

HAZARDOUS POLYMERIZATION: NONE

SECTION 7: SPILL OR LEAK PROCEDURES

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION 8: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

SECTION 9: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

********** SECTION 9: SPECIAL PRECAUTIONS ****CONTINUED****

BREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH
ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL
SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

THE FURNISHING OF THE INFOPMATION CONTAINED HEREIN DOES NOT CONSTITUTE A
REPRESENTATION BY VALSPAR THAT ANY PRODUCT OR PROCESS IS FREE FROM PATENT
INFRINGEMENT CLAIMS OF ANY THIRD PARTY OR DOES IT CONSTITUTE THE GRANTING OF A
LICENSE UNDER ANY PATENT OF VALSPAR OR ANY THIRD PARTY. VALSPAR ASSUMES NO
LIABILITY FOR ANY INFRINGEMENT WHICH MAY ARISE OUT OF THE USE OF THE PRODUCT.
VALSPAR WARRANTS THAT ITS PRODUCTS MEET THE SPECIFICATIONS WHICH IT SETS FOR
THEM. VALSPAR DISCLAIMS ALL OTHER WARRANTIES RELATING TO THE PRODUCTS, AND
DISCLAIMS ALL WARRANTIES RELATING TO THEIR APPLICATION, EXPRESS OR IMPLIED.
INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF
THE TERMS OF THIS WARRANTY, CONTRARY PROVISIONS OF PURCHASE ORDERS NONWITHSTAND
ING. IN THE EVENT THAT VALSPAR FINDS THAT THE PRODUCTS DELIVERED ARE
OFF-SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION, EITHER REPLACE THE
PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF, AND VALSPARS CHOICE OF ONE OF
THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUM-
STANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS
MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT
IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO
DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

JCP-630-02

V A L S P A R C O R P O R A T I O N

SARA SECTION 313 CHEMICAL REPORT

DATE: 01/16/90
CONTROL NO: IB0653404

CUSTOMER: THE KNAPHEIDE MFG CO
CUSTOMER NUMBER: 457210001

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
FXR0002	RED OXIDE PRIMER	H-1 H-2 P-3	A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	PCT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
78-93-3	2-BUTANONE	0.3	100%	H-1 H-2 P-3	YES			
1330-20-7	PHENYL,DIMETHYL	39.4	100%		YES			
100-41-4	BENZENE, ETHYL	8.1	100%	H-1 H-2 P-3	YES			
N/A	COBALT SALT OF MIXED ALIPHATIC ACIDS - SUPPLIER TR ADE SECRET	0.1	025%	H-1 H-2 P-3	YES			
N/A	MANGANESE ALKANOATE SUPPLIER TRADE SECRET	0.1	037%	H-1 H-2 P-3	YES			
7727-43-7	SULFURIC ACID, BARIUM SALT	4.2	000%	H-1 H-2	YES			
71-36-3	1-BUTANOL	1.2	100%	H-1 H-2 P-3	YES			

FOOTNOTES

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001
CUSTOMER INVOICE : 0653404

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : FXR0002-106-A-03
TRADE NAME : 64 FXR0002 RED OXIDE PRIMER
REVISION DATE : 12-08-89 DATE PRINTED : 01-16-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
COMMON(NA):AROMATIC NAPHTHA	5%	TLV TWA 100.00 PPM TLV STEL NOT ESTAB OSHA PEL NOT ESTAB CEILING NOT ESTAB RECOMND 50.00 PPM
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM).LT. AROM.		
COMMON(NA):XYLENE	40%	TLV TWA 100.00 PPM TLV STEL 150.00 PPM OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMND NOT ESTAB
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		
COMMON(NA):ETHYLBENZENE	10%	TLV TWA 100.00 PPM TLV STEL 125.00 PPM OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMND NOT ESTAB
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		
COMMON(NA):KAOLIN	5%	TLV TWA 10.00 MG/CU M TLV STEL NOT ESTAB OSHA PEL 10.00 MG/CU M CEILING NOT ESTAB RECOMND NOT ESTAB
CAS:1332-58-7 CHEMICAL: KAOLIN		
COMMON(NA):BARIUM SULPHATE	5%	TLV TWA 10.00 MG/CU M TLV STEL NOT ESTAB OSHA PEL 10.00 MG/CU M CEILING NOT ESTAB RECOMND NOT ESTAB
CAS:7727-43-7 CHEMICAL: SULFURIC ACID, BARIUM SALT		
COMMON(NA):TALC	5%	TLV TWA 10.00 MG/CU M TLV STEL NOT ESTAB OSHA PEL 2.00 MG/CU M CEILING NOT ESTAB RECOMND NOT ESTAB
CAS:14807-96-6 CHEMICAL: SILICIC ACID,MAGNESIUM SA LT (1:1)		
COMMON(NA):IRON OXIDE	5%	TLV TWA NOT ESTAB TLV STEL NOT ESTAB OSHA PEL 5.00 MG/CU M CEILING NOT ESTAB RECOMND NOT ESTAB
CAS:1309-37-1 CHEMICAL:		
COMMON(NA):N-BUTYL ALCOHOL	1%	TLV TWA 50.00 PPM TLV STEL NOT ESTAB OSHA PEL NOT ESTAB CEILING 50.00 (01) RECOMND NOT ESTAB
CAS:71-36-3 CHEMICAL: 1-BUTANOL		

(1) = PPM SKIN

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 243 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.01: 4.3
SPECIFIC GRAVITY: 1.15
PERCENT VOLATILE BY VOLUME: 71.52
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 16.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
CAN BE ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE, KIDNEY DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE, HEARING LOSS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
SILICON DIOXIDE CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA. ELIMINATE IGNITION SOURCES. REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS. AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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JCP-630-02

V A L S P A R C O R P O R A T I O N

SARA SECTION 313 CHEMICAL REPORT

DATE: 07/08/90
CONTROL NO: IB0655006

CUSTOMER: THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
FXA0007	GRAY LEAD FREE PRIM	H-1 H-2 P-3	A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	PCT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
N/A	COBALT SALT OF MIXED ALIPHATIC ACIDS - SUPPLIER TRADE SECRET	0.1	025%	H-1 H-2 P-3	YES			
N/A	MANGANESE ALKANOATE SUPPLIER TRADE SECRET	0.1	037%	H-1 H-2 P-3	YES			
7727-43-7	SULFURIC ACID, BARIUM SALT	4.9	000%	H-1 H-2	YES			
1330-20-7	PHENYL,DIMETHYL	38.8	100%		YES			
100-41-4	BENZENE, ETHYL	7.9	100%	H-1 H-2 P-3	YES			
71-36-3	1-BUTANOL	1.4	100%	H-1 H-2 P-3	YES			
78-93-3	2-BUTANONE	0.3	100%	H-1 H-2 P-3	YES			

FOOTNOTES

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

********** SECTION 7: SPILL OR LEAK PROCEDURES ****CONTINUED****

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

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V A L S P A R · C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001
CUSTOMER INVOICE : 0655006

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : FXA0007-106-A-02
TRADE NAME : 64 FXA0007 GRAY LEAD FREE PRIM
REVISION DATE : 06-26-90 DATE PRINTED : 07-08-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
COMMON(NA):KAOLIN	5%	TLV TWA 10.00 MG/CU M TLV STEL NOT ESTAB
CAS:1332-58-7 CHEMICAL: KAOLIN		OSHA PEL 10.00 MG/CU M CEILING NOT ESTAB RECOMND NOT ESTAB
COMMON(NA):BARIUM SULPHATE	5%	TLV TWA 10.00 MG/CU M TLV STEL NOT ESTAB
CAS:7727-43-7 CHEMICAL: SULFURIC ACID, BARIUM SALT		OSHA PEL 10.00 MG/CU M CEILING NOT ESTAB RECOMND NOT ESTAB
COMMON(NA):TITANIUM DIOXIDE	5%	TLV TWA 15.00 MG/CU M TLV STEL NOT ESTAB
CAS:13463-67-7 CHEMICAL: TITANIUM OXIDE		OSHA PEL 10.00 MG/CU M CEILING NOT ESTAB RECOMND NOT ESTAB
COMMON(NA):XYLENE	40%	TLV TWA 100.00 PPM TLV STEL 150.00 PPM
CAS:1330-20-7 CHEMICAL: PHENYL,DIMETHYL		OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMND NOT ESTAB
COMMON(NA):ETHYLBENZENE	10%	TLV TWA 100.00 PPM TLV STEL 125.00 PPM
CAS:100-41-4 CHEMICAL: BENZENE, ETHYL		OSHA PEL 100.00 PPM CEILING NOT ESTAB RECOMND NOT ESTAB
COMMON(NA):N-BUTYL ALCOHOL	1%	TLV TWA 50.00 PPM TLV STEL NOT ESTAB
CAS:71-36-3 CHEMICAL: 1-BUTANOL		OSHA PEL NOT ESTAB CEILING 50.00 (01) RECOMND NOT ESTAB
COMMON(NA):AROMATIC NAPHTHA	5%	TLV TWA 100.00 PPM TLV STEL NOT ESTAB
CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.		OSHA PEL NOT ESTAB CEILING NOT ESTAB RECOMND 50.00 PPM

(1) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 243 DEG F.
VAPOR PRESSURE MM HG AT 90 DEG F: 10.0
VAPOR DENSITY (AIR = 1.0): 4.3
SPECIFIC GRAVITY: 1.14
PERCENT VOLATILE BY VOLUME: 69.39
EVAPORATION RATE (BUTYL ACETATE = 1): 1.1
SOLUBILITY IN WATER: NO

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

********** SECTION 3: PHYSICAL DATA ****CONTINUED****
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 13.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
CAN BE ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, LIVER DAMAGE, KIDNEY DAMAGE.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE, HEARING LOSS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
SILICON DIOXIDE CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 1266092 CUSTOMER BATCH : UNKNOWN

SECTION 1: PRODUCT IDENTIFICATION

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : NOT APPLICABLE-NA
TRADE NAME : 40 90083 ZINC CHROM VTN W CB

SECTION 2: HAZARDOUS INGREDIENTS

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):PHOSPHORIC ACID	NOT EST	1.00	NOT EST
CHEMICAL: PHOSPHORIC ACID		(1)	
COMMON(NA):ISOPROPYL ALCOHOL	NOT EST	400.00	400.00
CHEMICAL: 2-PROPANOL		(2)	(2)

(1) = MG CU M
(2) = PPM

SECTION 3: PHYSICAL DATA

BOILING POINT: 180 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 32.8
VAPOR DENSITY (AIR = 1.0): 2.10
SPECIFIC GRAVITY: 0.91
PERCENT VOLATILE BY VOLUME: 92.15
EVAPORATION RATE (BUTYL ACETATE = 1): 1.70
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: YELLOW LIQUID, ODOR NORMAL FOR COATINGS PRODUCT.

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT TCC/PM DEG F : 55
LOWER EXPLOSIVE LIMIT : 2.00
UPPER EXPLOSIVE LIMIT : 12.00

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

SECTION 5: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
EYE DAMAGE AND PAIN.
BLISTERING OR DISCOLORATION OF SKIN AND PAIN.
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA. LOSS OF CONSCIOUSNESS.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED. USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.

SECTION 5: HEALTH HAZARD DATA CONTINUED

EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT: REMOVE CONTAMINATED CLOTHING UNDER SAFETY SHOWER AND DELUGE EXPOSED AREAS WITH WATER. GET MEDICAL ATTENTION.

SECTION 6: REACTIVITY DATA

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE PHOSPHORUS OXIDES

HAZARDOUS POLYMERIZATION NONE
CONDITIONS TO AVOID: NONE

SECTION 7: SPILL OR LEAK PROCEDURES

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION 8: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: NEOPRENE OR OTHER NONPOROUS.
EYE PROTECTION: CHEMICAL TYPE GOGGLES.
OTHER PROTECTIVE EQUIPMENT: NEOPRENE OR PLASTIC APRON AND PROTECTIVE CLOTHING COVERING EXPOSED SKIN AREAS.

SECTION 9: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES. KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE. AVOIDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

****
* SECTION 9: SPECIAL PRECAUTIONS CONTINUED *
****

ISSUE DATE: 07/18/86

ABBREVIATIONS USED:
ACGIH-AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH
ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL
SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

****
* DISCLAIMER SECTION *
****

THE FURNISHING OF THE INFORMATION CONTAINED HEREIN DOES NOT CONSTITUTE A REPRESENTATION BY VALSPAR THAT ANY PRODUCT OR PROCESS IS FREE FROM PATENT INFRINGEMENT CLAIMS OF ANY THIRD PARTY OR DOES IT CONSTITUTE THE GRANTING OF A LICENSE UNDER ANY PATENT OF VALSPAR OR ANY THIRD PARTY. VALSPAR ASSUMES NO LIABILITY FOR ANY INFRINGEMENT WHICH MAY ARISE OUT OF THE USE OF THE PRODUCT. VALSPAR WARRANTS THAT ITS PRODUCTS MEET THE SPECIFICATIONS WHICH IT SETS FOR THEM. VALSPAR DISCLAIMS ALL OTHER WARRANTIES RELATING TO THE PRODUCTS. AND DISCLAIMS ALL WARRANTIES RELATING TO THEIR APPLICATION, EXPRESS OR IMPLIED. INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF THE TERMS OF THIS WARRANTY, CONTRARY PROVISIONS OF PURCHASE ORDERS NONWITHSTANDING. IN THE EVENT THAT VALSPAR FINDS THAT PRODUCTS DELIVERED ARE NOT SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION, EITHER REPLACE THE PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF. AND VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

JCP-630-02

THE VALSPAR CORPORATION

VOC AND HAZARDOUS CHEMICAL REPORT

DATE: 01/13/89
CONTROL NO: IB0651385

CUSTOMER: THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
AAR016B	LEAD FREE RED ENAME	H-1 H-2 P-3	A	Y

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	PCT WT.	VOL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
1330-20-7	PHENYL,DIMETHYL	35.8	100%	H-1 H-2 P-3	Y			
	COBALT SALT OF MIXED ALIPHATIC ACIDS - SUPPLIER TRADE SECRET	0.1	025%	H-1 H-2 P-3	Y			
13463-67-7	TITANIUM DIOXIDE	0.1	000%	H-1 H-2	Y			

FOOTNOTES

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 0639416

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAR0158-106-A-03
TRADE NAME : 64 AAR0158 LEAD FREE RED ENAMEL

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: BENZENE, DIMETHYL	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):IRON OXIDE CAS:1309-37-1 CHEMICAL: IRON OXIDE	NOT EST	NOT EST	10.00 (2)
COMMON(NA):VM&P NAPHTHA CAS:8032-32-4 CHEMICAL: LIGROINE	NOT EST	420.00 (1)	NOT EST
COMMON(NA):AROMATIC NAPHTHA CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.	NOT EST	100.00 (1)	NOT EST

(1) = PPM
(2) = MG CU M

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 240 DEG F
VAPOR PRESSURE MM HG AT 68 DEG F: 6.0
VAPOR DENSITY (AIR = 1.0): 4.30
SPECIFIC GRAVITY: 0.98
PERCENT VOLATILE BY VOLUME: 68.35
EVAPORATION RATE (BUTYL ACETATE = 1): .61
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 47
LOWER EXPLOSIVE LIMIT : 0.70
UPPER EXPLOSIVE LIMIT : 6.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

* ********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA. ELIMINATE IGNITION SOURCES. REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS. AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 860716

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 0639693

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAA0341-106-A-02
TRADE NAME : 64 AAA0341 KNAPHEIDE GLOSS BLL

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: LIGROINE	NOT EST	100.00 (1)	NOT EST
COMMON(NA):VM&P NAPHTHA CAS:8032-32-4 CHEMICAL: LIGROINE	NOT EST	420.00 (1)	NOT EST
COMMON(NA):PROPYLENE GLYCOL MONO METHYL ETHER CAS:107-98-2 CHEMICAL: 1-METHOXY 2-PROPANOL	NOT EST	NOT EST	NOT EST
COMMON(NA):ETHYLBENZENE CAS:100-41-4 CHEMICAL: BENZENE, ETHYL	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):AROMATIC NAPHTHA CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),L T. AROM.	NOT EST	100.00 (1)	NOT EST
COMMON(NA):CARBON BLACK CAS:UNKNOWN CHEMICAL: CARBON BLACK	NOT EST	3.50 (2)	3.50 (2)
COMMON(NA):TOLUENE CAS:108-88-3 CHEMICAL: BENZENE, METHYL	NOT EST	100.00 (1)	200.00 (1)

(1) = PPM
(2) = MG CU M

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 230 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 28.0
VAPOR DENSITY (AIR = 1.0): 5.05
SPECIFIC GRAVITY: 0.94
PERCENT VOLATILE BY VOLUME: 69.70
EVAPORATION RATE (BUTYL ACETATE = 1): 2.00
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 45
LOWER EXPLOSIVE LIMIT : 0.90
UPPER EXPLOSIVE LIMIT : 12.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INCESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

********** SECTION 9: SPECIAL PRECAUTIONS ****CONTINUED****

OTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 860724

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTIN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** ISCLAIMER SECTION **********

THE FURNISHING OF THE INFORMATI CONTAINED HEREIN DOES NOT CONSTITUTE A REPRESENTATION BY VALSPAR THA ANY PRODUCT OR PROCESS IS FREE FROM PATENT INFRINGEMENT CLAIMS OF ANY THIR PARTY OR DOES IT CONSTITUTE THE GRANTING OF A LICENSE UNDER ANY PATENT OF VA PAR OR ANY THIRD PARTY. VALSPAR ASSUMES NO LIABILITY FOR ANY INFRINGEMENT ICH MAY ARISE OUT OF THE USE OF THE PRODUCT. VALSPAR WARRANTS THAT ITS PRO CTS MEET THE SPECIFICATIONS WHICH IT SETS FOR THEM. VALSPAR DISCLAIMS ALL O ER WARRANTIES RELATING TO THE PRODUCTS, AND DISCLAIMS ALL WARRANTIES RELATI TO THEIR APPLICATION, EXPRESS OR IMPLIED. INCLUDING BUT NOT LIMITED TO WA ANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. RECEIPT OF ODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF THE TERMS OF THIS WARRANTY, CON ARY PROVISIONS OF PURCHASE ORDERS NONWITHSTAND ING. IN THE EVENT THAT VALSPAR FINDS THAT THE PRODUCTS DELIVERED ARE FF-SPECIFICATION, VALSPAR W , AT ITS SOLE DISCRETION, EITHER REPLACE THE RODUCTS OR REFUND THE PURCHASE RICE THEREOF, AND VALSPARS CHOICE OF ONE OF HESE REMEDIES SHALL BE BUYERS LE REMEDY. VALSPAR WILL UNDER NO CIRCUM- STANCES BE LIABLE FOR CONSEQUEN AL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL ELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

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********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAA0341-106-A-01 BLACK ENAMEL
TRADE NAME :

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: LIGROINE	NOT EST	100.00 (1)	NOT EST
COMMON(NA):VM&P NAPHTHA CAS:8032-32-4 CHEMICAL: LIGROINE	NOT EST	420.00 (1)	NOT EST
COMMON(NA):PROPYLENE GLYCOL MONO METHYL ETHER CAS:107-98-2 CHEMICAL: 1-METHOXY 2-PROPANOL	NOT EST	NOT EST	NOT EST
COMMON(NA):ETHYLBENZENE CAS:100-41-4 CHEMICAL: BENZENE, ETHYL	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):MINERAL SPIRITS CAS:8032-32-4 CHEMICAL: LIGROINE	NOT EST	500.00 (1)	NOT EST
COMMON(NA):CARBON BLACK CAS:UNKNOWN CHEMICAL: CARBON BLACK	NOT EST	3.50 (2)	3.50 (2)
COMMON(NA):ETHYLENE GLYCOL MONO PROPYL ETHER CAS:2807-30-9 CHEMICAL: ETHANOL,2-PROPOXY-	NOT EST	NOT EST	NOT EST
COMMON(NA):TOLUENE CAS:108-88-3 CHEMICAL: BENZENE, METHYL	NOT EST	100.00 (1)	200.00 (1)

(1) = PPM
(2) = MG CU M

********** SECTION 3: PHYSICAL DATA **********

BOILT. POINT: 230 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 28.0
VAPOR DENSITY (AIR = 1.0): 5.05
SPECIFIC GRAVITY: 0.94
PERCENT VOLATILE BY VOLUME: 69.9%
EVAPORATION RATE (BUTYL ACETATE = 1): 2.00
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 45
LOWER EXPLOSIVE LIMIT : 0.90
UPPER EXPLOSIVE LIMIT : 15.80

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

ELIMINATE IGNITION SOURCES.
CLEAN UP WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 860724

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;

[redacted]

********** DISCLAIMER SECTION **********

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********** DISCLAIMER SECTION ****CONTINUED****

VALSPAR WARRANTS THAT ITS PRODUCTS MEET THE SPECIFICATIONS WHICH IT SETS FOR THEM. VALSPAR DISCLAIMS ALL OTHER WARRANTIES RELATING TO THE PRODUCTS, AND DISCLAIMS ALL WARRANTIES RELATING TO THEIR APPLICATION, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF THE TERMS OF THIS WARRANTY, CONTRARY PROVISIONS OF PURCHASE ORDERS NONWITHSTANDING. IN THE EVENT THAT VALSPAR FINDS THAT THE PRODUCTS DELIVERED ARE OFF-SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION, EITHER REPLACE THE PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF, AND VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

..... END REPORT .....

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 0638982

SECTION 1: PRODUCT IDENTIFICATION

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : AAR0142-106-A-02
TRADE NAME : 64 AAR0142 RED REPAIR EN MS3

SECTION 2: HAZARDOUS INGREDIENTS

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):SECONDARY BUTYL ALCOHOL CHEMICAL: 2-BUTANOL	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):XYLENE CHEMICAL: BENZENE, DIMETHYL	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):ETHYLBENZENE CHEMICAL: BENZENE, ETHYL	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):EXEMPT MINERAL SPIRITS CHEMICAL: NAPHTHA	NOT EST	100.00 (1)	NOT EST
COMMON(NA):ISOPROPYL ALCOHOL CHEMICAL: 2-PROPANOL	NOT EST	400.00 (1)	400.00 (1)
COMMON(NA):ETHYLENE GLYCOL MONO PROPYL ETHER CHEMICAL: ETHANOL,2-PROPOXY-	NOT EST	NOT EST	NOT EST
COMMON(NA):VM&P NAPHTHA CHEMICAL: LIGROINE	NOT EST	420.00 (1)	NOT EST
COMMON(NA):MINERAL SPIRITS CHEMICAL: LIGROINE	NOT EST	500.00 (1)	NOT EST
COMMON(NA):IRON OXIDE CHEMICAL: IRON OXIDE	NOT EST	NOT EST	10.00 (2)
COMMON(NA):N-BUTYL ALCOHOL CHEMICAL: 1-BUTANOL	NOT EST	50.00 (1)	100.00 (1)
COMMON(NA):BUTYL CELLOSOLVE CHEMICAL: ETHANOL, 2-BUTOXY-	NOT EST	25.00 (1)	50.00 (1)
COMMON(NA):PROPYLENE GLYCOL MONO METHYL ETHER ACETATE CHEMICAL: 1-METHOXY,2-PROPANOL,ACETATE	NOT EST	NOT EST	NOT EST
COMMON(NA):AROMATIC NAPHTHA CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.	NOT EST	100.00 (1)	NOT EST
COMMON(NA):TOLUENE CHEMICAL: BENZENE, METHYL	NOT EST	100.00 (1)	200.00 (1)

(1) = PPM
(2) = MG CU M

SECTION 3: PHYSICAL DATA

BOILING POINT: 180 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 32.8

SECTION 3: PHYSICAL DATA CONTINUED

VAPOR DENSITY (AIR = 1.0): 4.80
SPECIFIC GRAVITY: 0.97
PERCENT VOLATILE BY VOLUME: 63.44
EVAPORATION RATE (BUTYL ACETATE = 1): 2.00
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT (CC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 3.90
UPPER EXPLOSIVE LIMIT : 15.80

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

SECTION 5: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
EYE IRRITATION.
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

SECTION 6: REACTIVITY DATA

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

SECTION 7: SPILL OR LEAK PROCEDURES

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION 8: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

SECTION 9: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 851216

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

DISCLAIMER SECTION

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DISCLAIMER SECTION CONTINUED

PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF, AND VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

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V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT IDENTIFICATION

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : 0C12306184A021
TRADE NAME :

SECTION 2: HAZARDOUS INGREDIENTS

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):PHOSPHORIC ACID CHEMICAL: PHOSPHORIC ACID	NOT EST	1.00 (1)	NOT EST
COMMON(NA):ISOPROPYL ALCOHOL CHEMICAL: 2-PROPANOL	NOT EST	400.00 (2)	400.00 (2)

(1) = MG CU M
(2) = PPM

SECTION 3: PHYSICAL DATA

BOILING POINT: 180 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 32.8
VAPOR DENSITY (AIR = 1.0): 2.10
SPECIFIC GRAVITY: 0.91
PERCENT VOLATILE BY VOLUME: 92.15
EVAPORATION RATE (BUTYL ACETATE = 1): 1.70
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: YELLOW LIQUID, ODOR NORMAL FOR COATINGS PRODUCT.

SECTION 4: FIRE AND EXPLOSION HAZARD

[redacted] : [redacted]
LOWER E[illegible]OSIVE LIMIT : 2.00
UPPER EXPLOSIVE LIMIT : 12.00

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:

SECTION 4: FIRE AND EXPLOSION HAZARD CONTINUED

NONE

SECTION 5: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
EYE DAMAGE AND PAIN.
BLISTERING OR DISCOLORATION OF SKIN AND PAIN.
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT: REMOVE CONTAMINATED CLOTHING UNDER SAFETY SHOWER AND DELUGE EXPOSED AREAS WITH WATER. GET MEDICAL ATTENTION.

SECTION 6: REACTIVITY DATA

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE PHOSPHORUS OXIDES

HAZARDOUS POLYMERIZATION NONE
CONDITIONS TO AVOID: NONE

SECTION 7: SPILL OR LEAK PROCEDURES

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.

[redacted]AST[redacted]I[redacted]L [redacted]HOD[redacted]
DIS[redacted]E IN CHEMICAL DISPOSAL AREA OR IN A MANN[redacted] THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION 8: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

****
* SECTION 8: SPECIAL PROTECTION INFORMATION CONTINUED *
****

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: NEOPRENE OR OTHER NONPOROUS.
EYE PROTECTION: CHEMICAL TYPE GOGGLES.
OTHER PROTECTIVE EQUIPMENT: NEOPRENE OR PLASTIC APRON AND PROTECTIVE CLOTHING COVERING EXPOSED SKIN AREAS.

****
* SECTION 9: SPECIAL PRECAUTIONS *
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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES. KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 01/29/86

ABBREVIATIONS USED:
ACGIH-AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

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THE FURNISHING OF THE INFORMATION CONTAINED HEREIN DOES NOT CONSTITUTE A REPRESENTATION BY VALSPAR THAT ANY PRODUCT OR PROCESS IS FREE FROM PATENT INFRINGEMENT CLAIMS OF ANY THIRD PARTY OR DOES IT CONSTITUTE THE GRANTING OF A LICENSE UNDER ANY PATENT OF VALSPAR OR ANY THIRD PARTY. VALSPAR ASSUMES NO LIABILITY FOR ANY INFRINGEMENT WHICH MAY ARISE OUT OF THE USE OF THE PRODUCT. VALSPAR WARRANTS THAT ITS PRODUCTS MEET THE SPECIFICATIONS WHICH IT SETS FOR THEM. VALSPAR DISCLAIMS ALL OTHER WARRANTIES RELATING TO THE PRODUCTS, AND DISCLAIMS ALL WARRANTIES RELATING TO THEIR APPLICATION, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR

PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF THE TERMS OF THIS WARRANTY, CONTRARY PROVISIONS OF PURCHASE ORDERS NOWWITHSTANDING. IN THE EVENT THAT VALSPAR FINDS THAT PRODUCTS DELIVERED ARE OFF-SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION, EITHER REPLACE THE PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF, AND VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

..... END REPORT .....

JCP-63D-02

V A L S P A R C O R P O R A T I O N

SARA SECTION 313 CHEMICAL REPORT

DATE: 01/16/90
CONTROL NO: IBD65346D

CUSTOMER: THE KNAPHEIDE MFG CO

CUSTOMER NUMBER: 45721DD01

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
DD13T1R	VINYL WASH PR CLR AD P-3		A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	PCT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
7664-38-2	PHOSPHORIC ACID	4.3	015%	H-1	YES			
67-56-1	METHANOL	3.9	100%	H-1 H-2 P-3	YES			
108-10-1	2-PENTANONE, 4-METHYL-	0.9	100%	H-1 H-2 P-3	YES			

FOOTNOTES

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

V A L S P A R C O R P O R A T I O N

SARA SECTION 313 CHEMICAL REPORT

CUSTOMER: THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
0013Y8K	VINYL WASH PR DK GRN P-3		A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	PCT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
1330-20-7	PHENYL,DIMETHYL	1.2	100%		YES			
100-41-4	BENZENE, ETHYL	5.2	100%	H-1 H-2 P-3	YES			
13530-65-9	CHROMIC ACID, ZINC SALT. (1:1)	9.2	000%	H-2	YES			
71-36-3	1-BUTANOL	16.7	100%	H-1 H-2 P-3	YES			
67-56-1	METHANOL	1.3	100%	H-1 H-2 P-3	YES			
108-10-1	2-PENTANONE, 4-METHYL-	0.3	100%	H-1 H-2 P-3	YES			

FOOTNOTES

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE. SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
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HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

JCP-630-02

THE VALSPAR CORPORATION

SARA SECTION 313 CHEMICAL REPORT

DATE: 05/27/89
CONTROL NO: IB0652011

CUSTOMER: THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
960E001	WASH PRIMER-PART A	H-1 H-2 P-3	A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	(7) POT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ RQ	(2) SUB TPQ
13530-66-9	CHROMIC ACID, ZINC SALT, (1:1)	8.8	000%	H-2	YES			
71-36-3	1-BUTANOL	20.6	100%	H-1 H-2 P-3	YES			

FOOTNOTES

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(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 0652011

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : 960E001-142-A-00
TRADE NAME : 64 960E001 WASH PRIMER-PART A
ISSUE DATE : 07-29-87

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
COMMON(NA):TALC	1%	TLV TWA 10.00 MO/CU M TLV STEL NOT ESTAB
CAS:14807-96-6 CHEMICAL: SILICIC ACID,MAGNESIUM SA LT (1:1)		OSHA PEL 2.00 MG/CU M CEILING NOT ESTAB RECOMND NOT ESTAB
COMMON(1):ZINC CHROMATE PIGMENT	10%	TLV TWA 0.05 MO/CU M TLV STEL NOT ESTAB
CAS:13530-65-9 CHEMICAL: CHROMIC ACID, ZINC SALT, (1:1)		OSHA PEL NOT ESTAB CEILING 0.10 MG/CU M RECOMND NOT ESTAB
COMMON(NA):N-BUTYL ALCOHOL	20%	TLV TWA 50.00 PPM TLV STEL NOT ESTAB
CAS:71-36-3 CHEMICAL: 1-BUTANOL		OSHA PEL NOT ESTAB CEILING 50.00 (02) RECOMND NOT ESTAB
COMMON(NA):ISOPROPYL ALCOHOL	60%	TLV TWA 400.00 PPM TLV STEL 500.00 PPM
CAS:67-63-0 CHEMICAL: 2-PROPANOL		OSHA PEL 400.00 PPM CEILING NOT ESTAB RECOMND NOT ESTAB

(1) = THIS MATERIAL IS A CARCINOGEN PER NTP,IARC,ACGIH
(2) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 177 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 33.0
VAPOR DENSITY (AIR = 1.0): 2.6
SPECIFIC GRAVITY: 0.89
PERCENT VOLATILE BY VOLUME: 90.16
EVAPORATION RATE (BUTYL ACETATE = 1): 1.7
SOLUBILITY IN WATER: YES
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 53
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 12.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
EYE IRRITATION.
CAN BE ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION, MUCOUS MEMBRANE IRRITATION.
DELAYED EFFECTS (CHRONIC):
CONTAINS CHROMATES WHICH MAY CAUSE CANCER.
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
CONTAINS INGREDIENTS WHICH MAY CAUSE LIVER DAMAGE, KIDNEY DAMAGE, HEARING LOSS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
HALIDES CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCA STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURI AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOU EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

********** SECTION 8: SPECIAL PROTECTION INFORMATION ****CONTINUED****
PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED/BONDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS;
UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS
MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM;
PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. THE VALSPAR CORPORATION MAKES NO WARRANTIES EXPRESS OR IMPLIED AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA. THE VALSPAR CORPORATION FURTHER ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE TO VENDEES, USERS, OR THIRD PARTIES CAUSED BY THIS MATERIAL. SUCH VENDEES OR USERS ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THIS MATERIAL.

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001
CUSTOMER INVOICE : 0653460

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : 0013T1R-142-A-01
TRADE NAME : 37 13T1R VINYL WASH PR CLR AD
ISSUE DATE : 01-05-90 DATE PRINTED : 01-16-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %		
COMMON(NAI):PHOSPHORIC ACID	5%	TLV TWA	1.00 MG/CU M
		TLV STEL	3.00 MG/CU M
CAS:7664-38-2 CHEMICAL: PHOSPHORIC ACID		OSHA PEL	1.00 MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NAI):ISOPROPYL ALCOHOL	10%	TLV TWA	400.00 PPM
		TLV STEL	500.00 PPM
CAS:67-63-0 CHEMICAL: 2-PROPANOL		OSHA PEL	400.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NAI):ETHYL ALCOHOL	80%	TLV TWA	1000.00 PPM
		TLV STEL	NOT ESTAB
CAS:64-17-5 CHEMICAL: ETHANOL		OSHA PEL	1000.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):METHYL ALCOHOL	5%	TLV TWA	200.00 PPM
		TLV STEL	250.00 (01)
CAS:67-56-1 CHEMICAL: METHANOL		OSHA PEL	200.00 (01)
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NAI:ETHYL ACETATE	5%	TLV TWA	400.00 PPM
		TLV STEL	NOT ESTAB
CAS:141-78-6 CHEMICAL: ACETIC ACID,ETHYL ESTER		OSHA PEL	400.00 PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

(1) = PPM SKIN

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 148 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 96.0
VAPOR DENSITY (AIR = 1.0): 3.0
SPECIFIC GRAVITY: 0.84
PERCENT VOLATILE BY VOLUME: 98.00
EVAPORATION RATE (BUTYL ACETATE = 1): 4.6
SOLUBILITY IN WATER: YES
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 52
LOWER EXPLOSIVE LIMIT : 2.00
UPPER EXPLOSIVE LIMIT : 19.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

********** SECTION 4: FIRE AND EXPLOSION HAZARD ****CONTINUED****

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
REDNESS OR DRYNESS OF SKIN.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION.
DELAYED EFFECTS (CHRONIC):
EYE DAMAGE AND PAIN.
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, INDUCE VOMITING IMMEDIATELY AS DIRECTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT: REMOVE CONTAMINATED CLOTHING UNDER SAFETY SHOWER AND DELUGE EXPOSED AREAS WITH WATER. GET MEDICAL ATTENTION.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:

•••••••••••••••••••• SECTION 8: SPECIAL PROTECTION INFORMATION ••••CONTINUED••••
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: CHEMICAL TYPE GOGGLES.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

•••••••••••••••••••• SECTION 9: SPECIAL PRECAUTIONS ••••••••••••••••••

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

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KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

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OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION;
IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION;
TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

•••••••••••••••••••• DISCLAIMER SECTION ••••••••••••••••••

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MATERIAL SAFETY DATA SHEET

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : 0090083
TRADE NAME : VINYL WASH PRIMER REDUCER - PART B

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):PHOSPHORIC ACID	NOT EST	1.00	NOT EST
CAS:UNKNOWN CHEMICAL: PHOSPHORIC ACID		(1)	
COMMON(NA):ETHYL ALCOHOL	NOT EST	0.00	0.00
CAS:64-17-5 CHEMICAL: ETHANOL		(2)	(2)

(1) - MG CU M
(2) - PPM

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 165 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 60.0
VAPOR DENSITY (AIR = 1.0): 1.60
SPECIFIC GRAVITY: 0.86
PERCENT VOLATILE BY VOLUME: 96.08
EVAPORATION RATE (BUTYL ACETATE = 1): 1.90
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 6: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 61
LOWER EXPLOSIVE LIMIT : 3.30
UPPER EXPLOSIVE LIMIT : 20.70

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
[illegible] WITH WATER [illegible]

UNUSU[illegible] FIRE AND EXPLOSIVE HAZARDS:

N[illegible]

***** ********** SECTION 5: HEALTH HAZARD D[illegible] **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
EYE IRRITATION.
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE PHOSPHORUS OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

EX. BION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS: **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 042782

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS; MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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[redacted]
STANC..S BE LIABLE FOR CONSEQUENTIAL DAMAGES, EX..PT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

JCP-630-02

THE VALSPAR CORPORATION

SARA SECTION 313 CHEMICAL REPORT

DATE: 05/27/89
CONTROL NO: IBD652D11

CUSTOMER: THE KNAPHEIDE MFG CO. CUSTOMER NUMBER: 457210000

PRODUCT	PRODUCT NAME	(5) 311/312 CATEGORY	(6) 311/312 TYPE	(3) SECTION 313
990T004	CATALYST PART B MIL-	H-1 H-2 P-3	A	YES

SUMMARY OF COMPONENTS

CAS NUMBER	CHEMICAL NAME	(7) POT WT.	(7) VOLTL	(5) 311/312 CATEGORY	(3) SEC 313	(4) 313 CAT	(1) EXT HAZ SUB RQ	(2) TPQ
7664-38-2	PHOSPHORIC ACID	16.0	025%	H-1 H-2	YES			

FOOTNOTES

(1) = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(2) = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
(3) = TOXIC CHEMICAL, SEC. 313
(4) = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
(5) = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD
(6) = TYPE A = LIQUID MIXTURE D = PURE LIQUID
B = SOLID MIXTURE E = PURE SOLID
C = GASEOUS MIXTURE F = PURE GAS
(7) = VOLATILE PERCENT

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 45721DDDD
CUSTOMER INVOICE : 0652011

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 11D1 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE ND : 1-8DD-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRDDUCT
FORMULA : 99DTDD4-142-A-DD
TRADE NAME : 64 99DTDD4 CATALYST PART B MIL-
REVISION DATE : 02-D3-89

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %		
COMMON(NA):PHOSPHORIC ACID	15%	TLV TWA	1.DD MG/CU M
		TLV STEL	3.DD MG/CU M
CAS:7664-38-2 CHEMICAL: PHOSPHORIC ACID		DSHA PEL	1.DD MG/CU M
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB
COMMON(NA):ISDPROPYL ALCDHOL	65%	TLV TWA	4DD.DD PPM
		TLV STEL	5DD.DD PPM
CAS:67-63-D CHEMICAL: 2-PRDPANDL		DSHA PEL	4DD.DD PPM
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

********** SECTION 3: PHYSICAL DATA **********

BOILING PDINT: 177 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 33.D
VAPOR DENSITY (AIR = 1.D): 2.1
SPECIFIC GRAVITY: D.92
PERCENT VOLATILE BY VOLUME: 92.56
EVAPORATION RATE (BUTYL ACETATE = 1): 1.7
SDLUBILITY IN WATER: YES
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 55
LDWER EXPLOSIVE LIMIT : 3.DD
UPPER EXPLOSIVE LIMIT : 12.DD

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/DR WATER FDG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS DR AIR MASKS.
CONTAINERS EXPOSED TD FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLDSIVE HAZARDS:
NDNE

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NDT REQUIRED FDR MIXTURE.

EFFECTS DF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
EYE IRRITATION.
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TD INGREDIENTS IN THIS PRDDUCT MAY CAUSE NOSE AND THRDAT IRRITATION, EYE IRRITATION, EYE BURNS, SKIN BURNS, RESPIRATORY-TRACT IRRITATION, MUCDUS MEMBRANE IRRITATION.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSDCIATED REPEATED AND PROLONGED OCCUPATIONAL

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED**

DVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL DR FATAL.

MEDICAL CDNDITIDNS GENERALLY AGGRAVATED BY EXPDSURE - ANY RESPIRATDRY DR SKIN CDNDITIDN.

EMERGENCY AND FIRST AID PRDCEDURES:
INHALATIDN: REMDVE PERSDN FRDM EXPDSURE AREA. IF BREATHING HAS STDPPED, USE MDUTH-TD-MDUTH RESUSCITATIDN AND GET MEDICAL ATTENTIDN.
EYE CDNTACT: FLUSH WITH WATER FDR 15 MINUTES. GET MEDICAL ATTENTIDN.
SKIN CDNTACT: WASH WITH SDAP AND WATER.

POSSIBLE RDUTES DF ENTRY: INHALATIDN, INGESTIDN, SKIN ABSDRBTIDN.

********** SECTIDN 6: REACTIVITY DATA **********

THIS PRDDUCT IS STABLE
CDNDITIDNS TD AVDID: NDNE
INCDMPATIBILITY: STRDNG DXIDIZERS

HAZARDDUS DECDMPDSITIDN PRDDUCTS:
CARBDN DIDXIDE/MDNDXIDE PHDSPHDRUS DXIDES

HAZARDDUS PDLYMERIZATIDN: NDNE

********** SECTIDN 7: SPILL DR LEAK PRDCEDURES **********

VENTILATE AREA. AVDID BREATHING DF VAPDRS. USE SELF-CDNTAINED BREATHING APPARATUS DR AIRMASK FDR LARGE SPILLS IN A CDNFINED AREA.
ELIMINATE IGNITIDN SDURCES.
REMDVE WITH INERT ABSDRBENT AND NDN-SPARKING TDDLS.
AVDID CDNTACT WITH EYES.

WASTE DISPDSAL METHDD:
DISPDSE IN CHEMICAL DISPDSAL AREA DR IN A MANNER THAT CDMPLIES WITH LDCAL, STATE, AND FEDERAL REGULATIDNS. DD NDT INCINERATE CLDSED CDNTAINERS.

********** SECTIDN 8: SPECIAL PRDTECTIDN INFDRMATIDN **********

RESPIRATDRY PRDTECTIDN:
WEAR APPRDPRIATE, PRDPERLY FITTED RESPIRATDR (NIDSH/MSHA APPRDVED) DURING AND AFTER APPLICATIDN UNLESS AIR MDNITDRING VAPDR/MIST LEVELS ARE BELDW APPLICABLE LIMITS. FDLLDW RESPIRATDR MANUFACTURERS DIRECTIDNS FDR RESPIRATDR USE.

VENTILATIDN:
REQUIRED FDR SPRAYING DR IN A CDNFINED AREA, VENTILATIDN EQUIPMENT SHDULD EXPLDSIDN PRDDF. ELIMINATE IGNITIDN SDURCES

PRDTECTIVE GLDVES: USUAL HAND PRDTECTIDN FDR PAINT APPLICATIDN.
EYE PRDTECTIDN: USUAL EYE PRDTECTIDN FDR APPLYING PAINT.
DTHER PRDTECTIVE EQUIPMENT: USUAL CLDTHING FDR PAINTING DPERATIDNS.

********** SECTIDN 9: SPECIAL PRECAUTIDNS **********

PRECAUTIDNS TD BE TAKEN IN HANDLING AND STDRAGE:

CDNTAINERS SHDULD BE GRDUNDED/BDNDED WHEN PDURING. AVDID FREE FALL LIQUID IN EXCESS DF A FEW INCHES.
KEEP AWAY FRDM HEAT, SPARKS AND DPEN FLAMES. KEEP CDNTAINER CLDSED WHEN NDT IN USE. DD NDT STDRE ABDVE 12D DEG F. BASED DN THE PRDDUCT FLA POINT AND VAPDR PRESSURE SUITABLE STDRAGE SHDULD BE PRDVIDED IN ACCDRDANCE WIT OSHA REGULATIDN 1910. 1D6. EMPTY CDNTAINERS MAY CDNTAIN PRDDUCT RESIDUE, INCLUDING FLAMABLE DR EXPLDSIVE VAPDRS. DD NDT CUT, PUNCTURE DR WELD DN DR NEAR CDNTAINER. ALL LABEL WARNINGS MUST BE DBSERVED UNTIL THE CDNTAINER HAS BEEN CLEANED DR RECDNDITIDNED.

********** SECTION 9: SPECIAL PRECAUTIONS ****CONTINUED****

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

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DATE OF PREP

Section I

MANUFACTURER'S NAME THE VALSPAR CORPORATION

STREET ADDRESS 2500 8th Avenue CITY STATE AND ZIP CODE East Moline, Illinois 61244

EMERGENCY TELEPHONE NO. (309) 755-5295

PRODUCT CLASS Alkyd MANUFACTURERS CODE IDENTIFICATION AX79231

TRADE NAME Duracote 400 Black Air Dry Enamel

Section II — HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV PPM	TLV mg/m³	LEL	VAP PRESS @ 2
Xylene	53.0	100		1.3	6.0 M
Aliphatic Naphtha	7.0	400		1.1	10.0 M

Section III — PHYSICAL DATA

BOILING RANGE 243-285° F

VAPOR DENSITY [X] HEAVIER. [ ] LIGHTER THAN AIR

EVAPORATION RATE [ ] FASTER [X] SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME 68.6

WEIGHT PER GALLON 8.0

Section IV — FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY Red Label

FLASH POINT 59° F

LEL Sec.

EXTINGUISHING MEDIA CLASS B EXTINGUISHERS (CO_2 DRY CHEMICAL OR FOAM)

UNUSUAL FIRE AND EXPLOSION HAZARDS

KEEP CONTAINER CLOSED. ISOLATE FROM HEAT, SPARKS AND OPEN FLAME.

SPECIAL FIRE FIGHTING PROCEDURES

DO NOT USE WATER.

THRESHOLD LIMIT VALUE See Section II

EFFECTS OF OVEREXPOSURE

IRRITATION OR RESPIRATORY TRACT: DIZZINESS.
SKIN OR EYE CONTACT: PRIMARY IRRITATION.

EMERGENCY AND FIRST AID PROCEDURES

REMOVE FROM EXPOSURE. WASH EXPOSED PARTS WITH WATER.
REMOVE CONTAMINATED CLOTHING.

Section VI — REACTIVITY DATA

STABILITY [ ] UNSTABLE [X] STABLE CONDITIONS TO AVOID N.A.

INCOMPATABILITY (Materials to avoid) N.A.

HAZARDOUS DECOMPOSITION PRODUCTS NONE

HAZARDOUS POLYMERIZATION [ ] MAY OCCUR [X] WILL NOT OCCUR

CONDITIONS TO AVOID

Section VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION. VENTILATE AREA.

WASTE DISPOSAL METHOD

LANDFILL OR INCINERATION.

Section VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

RESPIRATOR

VENTILATION

ADEQUATE TO PROVIDE GENERAL DILUTION TO KEEP LTL BELOW ACCEPTABLE LIMIT.

PROTECTIVE GLOVES YES

EYE PROTECTION YES

OTHER PROTECTIVE EQUIPMENT NONE

Section IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

DO NOT STORE ABOVE 120° F

OTHER PRECAUTIONS

DO NOT TAKE INTERNALLY. CONTAINERS SHOULD BE GROUNDED WHEN POURING.

DATA IN THIS MATERIAL SAFETY DATA SHEET IS ACCURATE AND RELIABLE TO THE BEST OF OUR KNOWLEDGE AND BELIEF AND RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR

Section I

MANUFACTURER'S NAME: THE VALSPAR CORPORATION

STREET ADDRESS: 2500 8th Avenue

CITY, STATE, AND ZIP CODE: East Moline, Illinois 61244

EMERGENCY TELEPHONE NO.: (309) 755-5295

PRODUCT CLASS: Alkyd

MANUFACTURERS CODE IDENTIFICATION: AX15205

TRADE NAME: Duracote 400 Red Oxide Primer

Section II — HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV PPM	TLV mg/m³	LEL	VAPOR PRESSURE @ 20° C
Xylene	42.0	100		1.3	6.0 MM
Aromatic Hydro carbon (SC-100)	6.0	35		0.7	3.0 MM

Section III — PHYSICAL DATA

BOILING RANGE: 281-344° F

VAPOR DENSITY: [X] HEAVIER. [ ] LIGHTER THAN AIR

EVAPORATION RATE: [ ] FASTER [X] SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME: 65.1

WEIGHT PER GALLON: 9.7

Section IV — FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY: Red Label

FLASH POINT: 80° F

LEL: See II

EXTINGUISHING MEDIA: CLASS B EXTINGUISHERS (CO_2 DRY CHEMICAL OR FOAM)

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINER CLOSED. ISOLATE FROM HEAT, SPARKS AND OPEN FLAME.

SPECIAL FIRE FIGHTING PROCEDURES:
DO NOT USE WATER.

THRESHOLD LIMIT VALUE See Section V

EFFECTS OF OVEREXPOSURE

IRRITATION OR RESPIRATORY TRACT: DIZZINESS.
SKIN OR EYE CONTACT: PRIMARY IRRITATION.

EMERGENCY AND FIRST AID PROCEDURES

REMOVE FROM EXPOSURE. WASH EXPOSED PARTS WITH WATER.
REMOVE CONTAMINATED CLOTHING.

Section VI — REACTIVITY DATA

STABILITY [ ] UNSTABLE [X] STABLE CONDITIONS TO AVOID N.A.

INCOMPATABILITY (Materials to avoid) N.A.

HAZARDOUS DECOMPOSITION PRODUCTS NONE

HAZARDOUS POLYMERIZATION [ ] MAY OCCUR [XX] WILL NOT OCCUR

CONDITIONS TO AVOID

Section VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION. VENTILATE AREA.

WASTE DISPOSAL METHOD

LANDFILL OR INCINERATION.

Section VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

RESPIRATOR

VENTILATION

ADEQUATE TO PROVIDE GENERAL DILUTION TO KEEP LTL BELOW ACCEPTABLE LIMIT.

PROTECTIVE GLOVES YES

EYE PROTECTION YES

OTHER PROTECTIVE EQUIPMENT NONE

Section IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

DO NOT STORE ABOVE 120° F

OTHER PRECAUTIONS

DO NOT TAKE INTERNALLY. CONTAINERS SHOULD BE GROUNDED WHEN POURING.

V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210000
CUSTOMER INVOICE : 0638096 CUSTOMER BATCH : 61E4607

SECTION 1: PRODUCT IDENTIFICATION

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : NOT APPLICABLE-NA
TRADE NAME : 64 AXY0131 FAST DRY YELLOW EN

SECTION 2: HAZARDOUS INGREDIENTS

NAME	RECM LEVEL	TLV	PEL
COMMON(NA):XYLENE CHEMICAL: BENZENE, DIMETHYL	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):AROMATIC NAPHTHA CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.	NOT EST	100.00 (1)	NOT EST
COMMON(NA):TITANIUM DIOXIDE CHEMICAL: TITANIUM DIOXIDE	NOT EST	10.00 (2)	15.00 (2)
COMMON(3):LEAD CHROMATE PIGMENT CHEMICAL: CI PIGMENT YELLOW 34	NOT EST	0.05 (2)	0.05 (2)
COMMON(NA):VM&P NAPHTHA CHEMICAL: LIGROINE	NOT EST	420.00 (1)	NOT EST

LEAD (AS PB) IS 4.2400 PERCENT

(1) = PPM
(2) = MG CU M
(3) = THIS MATERIAL IS A CARCINOGEN PER NTP

SECTION 3: PHYSICAL DATA

BOILING POINT: 240 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 6.0
VAPOR DENSITY (AIR = 1.0): 4.30
SPECIFIC GRAVITY: 1.06
PERCENT VOLATILE BY VOLUME: 69.42
EVAPORATION RATE (BUTYL ACETATE = 1): .61
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: YELLOW LIQUID, ODOR NORMAL FOR COATINGS PRODUCT.

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT TCC/PM DEG F : 72
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 6.00

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
NONE

SECTION 5: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

SECTION 6: REACTIVITY DATA

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION NONE
CONDITIONS TO AVOID: NONE

SECTION 7: SPILL OR LEAK PROCEDURES

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION 8: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

SECTION 9: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES. KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE.

SECTION 9: SPECIAL PRECAUTIONS CONTINUED

INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT. PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 01/16/86

ABBREVIATIONS USED:
ACGIH-AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LFL-LOWER EXPLOSIVE LIMITS; UFL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

DISCLAIMER SECTION

THE FURNISHING OF THE INFORMATION CONTAINED HEREIN DOES NOT CONSTITUTE A REPRESENTATION BY VALSPAR THAT ANY PRODUCT OR PROCESS IS FREE FROM PATENT INFRINGEMENT CLAIMS OF ANY THIRD PARTY OR DOES IT CONSTITUTE THE GRANTING OF A LICENSE UNDER ANY PATENT OF VALSPAR OR ANY THIRD PARTY. VALSPAR ASSUMES NO LIABILITY FOR ANY INFRINGEMENT WHICH MAY ARISE OUT OF THE USE OF THE PRODUCT. VALSPAR WARRANTS THAT ITS PRODUCTS MEET THE SPECIFICATIONS WHICH IT SETS FOR THEM. VALSPAR DISCLAIMS ALL OTHER WARRANTIES RELATING TO THE PRODUCTS. AND DISCLAIMS ALL WARRANTIES RELATING TO THEIR APPLICATION, EXPRESS OR IMPLIED. INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. RECEIPT OF PRODUCTS FROM VALSPAR CONSTITUTES ACCEPTANCE OF THE TERMS OF THIS WARRANTY. CONTRARY PROVISIONS OF PURCHASE ORDERS NONWITHSTANDING. IN THE EVENT THAT VALSPAR FINDS THAT PRODUCTS DELIVERED ARE OFF-SPECIFICATION, VALSPAR WILL, AT ITS SOLE DISCRETION. EITHER REPLACE THE PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF. AND VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

CUSTOMER NAME : THE KNAPHEIDE MFG CO CUSTOMER NUMBER: 457210001
CUSTOMER INVOICE : 0714235

********** SECTION 1: PRODUCT IDENTIFICATION **********

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : YXR0196-107-A-00
TRADE NAME : 64 YXR0196 VAL-FLEX RED UNDRBDY
REVISION DATE : 10-26-89 DATE PRINTED : 03-27-90

********** SECTION 2: HAZARDOUS INGREDIENTS **********

NAME	APPROX WT %	
COMMON(NAI:MINERAL SPIRITS	35%	TLV TWA 100.00 PPM TLV STEL NOT ESTAB OSHA PEL 300.00 PPM CEILING NOT ESTAB RECOMND NOT ESTAB
CAS:64742-47-8 CHEMICAL: DISTILLATES (PETROLEUM), HYDROTREATED LIGHT		
COMMON(NA):IRON OXIDE	5%	TLV TWA 5.00 MG/CU M TLV STEL NOT ESTAB OSHA PEL 5.00 MG/CU M CEILING NOT ESTAB RECOMND NOT ESTAB
CAS:1309-37-1 CHEMICAL: IRON OXIDE		

********** SECTION 3: PHYSICAL DATA **********

BOILING POINT: 315 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 2.0
VAPOR DENSITY (AIR = 1.0): 5.1
SPECIFIC GRAVITY: 1.10
PERCENT VOLATILE BY VOLUME: 50.07
EVAPORATION RATE (BUTYL ACETATE = 1): .1
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

********** SECTION 4: FIRE AND EXPLOSION HAZARD **********

FLASH POINT TCC/PM DEG F : 105
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 6.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS. CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:
CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
IMMEDIATE EFFECTS (ACUTE):
HARMFUL IF INHALED. MAY AFFECT THE BRAIN, NERVOUS SYSTEM OR RESPIRATORY SYSTEM, CAUSING DIZZINESS, HEADACHE, NAUSEA OR RESPIRATORY IRRITATION.
OVEREXPOSURE TO INGREDIENTS IN THIS PRODUCT MAY CAUSE NOSE AND THROAT IRRITATION, EYE IRRITATION, SKIN IRRITATION.
DELAYED EFFECTS (CHRONIC):
NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL

********** SECTION 5: HEALTH HAZARD DATA ****CONTINUED****

OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE METAL OXIDES SULFUR OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA. AVOID CONTACT WITH EYES.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:
WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF.

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

ABBREVIATIONS USED:
OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH

•••••••••••••••••••• SECTION 9: SPECIAL PRECAUTIONS ••••CONTINUED••••

ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN;RECM-RECOMMENDED;TLV-THRESHOLD LIMIT VALUES.

•••••••••••••••••••• DISCLAIMER SECTION ••••••••••••••••••

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V A L S P A R C O R P O R A T I O N
MATERIAL SAFETY DATA SHEET

HiBuild Primer

SECTION 1: PRODUCT IDENTIFICATION

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
TELEPHONE NUMBER : (612) 332-7371
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : 8AA2530-106-A-02
TRADE NAME : PRIMER SURFACER

SECTION 2: HAZARDOUS INGREDIENTS

NAME	APPROX WT. %	RECM LEVEL	TLV	PEL
COMMON(NA):XYLENE CAS:1330-20-7 CHEMICAL: BENZENE, DIMETHYL	15%	NOT EST	100.00 (1)	100.00 (1)
COMMON(NA):TITANIUM DIOXIDE CAS:13463-67-7 CHEMICAL: TITANIUM DIOXIDE	5%	NOT EST	10.00 (2)	15.00 (2)
COMMON(NA):AROMATIC NAPHTHA CAS:64742-95-6 CHEMICAL: SOLVENT NAPHTHA(PETROLEUM),LT. AROM.	15%	NOT EST	100.00 (1)	NOT EST

(1) = PPM
(2) = MG CU M

SECTION 3: PHYSICAL DATA

BOILING POINT: 282 DEG F.
VAPOR PRESSURE MM HG AT 68 DEG F: 6.0
VAPOR DENSITY (AIR = 1.0): 4.30
SPECIFIC GRAVITY: 1.49
PERCENT VOLATILE BY VOLUME: 51.4
EVAPORATION RATE (BUTYL ACETATE = 1): .61
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT TCC/PM DEG F : 81
LOWER EXPLOSIVE LIMIT : 0.9%

EXTI[illegible]ISHING MEDIA: CARBON DIOXIDE, DRY CHEMIC[illegible], FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS. CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:

CONTAINS OXIDIZING MATERIALS. CONTAMINATED RAGS, WIPES, SAWDUST, ETC. MAY CATCH FIRE SPONTANEOUSLY. STORE WASTE UNDER WATER IN CLOSED METAL CONTAINERS UNTIL DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

********** SECTION 5: HEALTH HAZARD DATA **********

THRESHOLD LIMIT VALUE: NOT REQUIRED FOR MIXTURE.

EFFECTS OF OVEREXPOSURE:
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE - ANY RESPIRATORY OR SKIN CONDITION.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION: REMOVE PERSON FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, USE MOUTH-TO-MOUTH RESUSCITATION AND GET MEDICAL ATTENTION.
EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES.
SKIN CONTACT: WASH WITH SOAP AND WATER.

POSSIBLE ROUTES OF ENTRY: INHALATION, INGESTION, SKIN ABSORBTION.

********** SECTION 6: REACTIVITY DATA **********

THIS PRODUCT IS STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY: NA

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE/MONOXIDE METAL OXIDES

HAZARDOUS POLYMERIZATION: NONE

********** SECTION 7: SPILL OR LEAK PROCEDURES **********

VENTILATE AREA. AVOID BREATHING OF VAPORS. USE SELF-CONTAINED BREATHING APPARATUS OR AIRMASK FOR LARGE SPILLS IN A CONFINED AREA.
ELIMINATE IGNITION SOURCES.
REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.
AVOID ALL PERSONAL CONTACT.

WASTE DISPOSAL METHOD:
DISPOSE IN CHEMICAL DISPOSAL AREA OR IN A MANNER THAT COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

********** SECTION 8: SPECIAL PROTECTION INFORMATION **********

RESPIRATORY PROTECTION:

[redacted] [redacted] [redacted]ER [redacted]LI[redacted]ION [redacted]LES [redacted]AIR [redacted]NIT[redacted]NG [redacted]POR[redacted]ST [redacted]VEL[redacted]RE [redacted]LOW [redacted] [redacted] [redacted] [redacted]
[illegible]LICABLE LIMITS. FOLLOW RESPIRATOR MANUF[illegible]URERS DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
REQUIRED FOR SPRAYING OR IN A CONFINED AREA, VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF. ELIMINATE IGNITION SOURCES

PROTECTIVE GLOVES: USUAL HAND PROTECTION FOR PAINT APPLICATION.
EYE PROTECTION: USUAL EYE PROTECTION FOR APPLYING PAINT.
OTHER PROTECTIVE EQUIPMENT: USUAL CLOTHING FOR PAINTING OPERATIONS.

********** SECTION 9: SPECIAL PRECAUTIONS **********

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUID IN EXCESS OF A FEW INCHES.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE ABOVE 120 DEG F. BASED ON THE PRODUCT FLASH POINT AND VAPOR PRESSURE SUITABLE STORAGE SHOULD BE PROVIDED IN ACCORDANCE WITH OSHA REGULATION 1910. 106. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

ISSUE DATE: 850403

ABBREVIATIONS USED:

OSHA-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; IARC-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; LEL-LOWER EXPLOSIVE LIMITS; UEL-UPPER EXPLOSIVE LIMITS; MG CU M-MILLIGRAMS PER METERS CUBED; MM-MILLIMETERS MPPCF-MILLIONS OF PARTICLES PER CUBIC FOOT; MSHA-MINE SAFETY AND HEALTH ADMINISTRATION; NA-NOT APPLICABLE; NIOSH-NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH; NOT EST-NOT ESTABLISHED; NTP-NATIONAL TOXICOLOGY PROGRAM; PB-LEAD; PEL-PERMISSIBLE EXPOSURE LEVEL; PPM-PARTS PER MILLION; TCC/PM-TAG CLOSED CUP/PENSKY-MARTEN; RECM-RECOMMENDED; TLV-THRESHOLD LIMIT VALUES.

********** DISCLAIMER SECTION **********

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[redacted] IN [redacted] E[redacted]T [redacted] [redacted]SPA[redacted] FI[redacted] TH[redacted] TH[redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted]
OFF[illegible]ECIFICATION, VALSPAR WILL, AT ITS SO[illegible] DISCRETION, EITHER REPLACE THE PRODUCTS OR REFUND THE PURCHASE PRICE THEREOF, AND VALSPARS CHOICE OF ONE OF THESE REMEDIES SHALL BE BUYERS SOLE REMEDY. VALSPAR WILL UNDER NO CIRCUMSTANCES BE LIABLE FOR CONSEQUENTIAL DAMAGES, EXCEPT INSOFAR AS A LIABILITY IS MANDATED BY LAW. VALSPAR WILL DELIVER PRODUCTS AT AGREED TIMES INSOFAR AS IT IS REASONABLY ABLE TO DO SO, BUT VALSPAR SHALL NOT BE LIABLE FOR FAILURE TO DELIVER ON TIME WHEN THE FAILURE IS BEYOND ITS REASONABLE CONTROL.

..... END REPORT .....

FOR COATINGS, RESINS AND RELATED MATERIALS

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

DATE OF PREP March 31, 1986

Section I

MANUFACTURER'S NAME Watson Protective Coatings, Inc.

STREET ADDRESS 325 Paul Avenue CITY, STATE, AND ZIP CODE St. Louis, MO 63135

EMERGENCY TELEPHONE NO. (314) 521-2000

PRODUCT CLASS Rustproofing MANUFACTURERS CODE IDENTIFICATION Armor Shield 231

TRADE NAME Armor Shield

Section II — HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV PPM	TLV mg/M³	LEL	VAPOR PRESSURE
Aliphatic Hydrocarbon	48	500			

Section III — PHYSICAL DATA

BOILING RANGE 300°F VAPOR DENSITY [XXX] HEAVIER [ ] LIGHTER THAN AIR

EVAPORATION RATE [ ] FASTER [XX] SLOWER THAN ETHER PERCENT VOLATILE BY VOLUME 48 WEIGHT PER GALLON 7.8

Section IV — FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY Combustible FLASH POINT 105°F LEL

EXTINGUISHING MEDIA

Dry chemical, foam, sand/earth

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

SPECIAL FIRE FIGHTING PROCEDURES

Use self-contained breathing apparatus when fighting fire.

Section V — HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE

Eye, nose, or throat irritation; Dizziness if used in unventillated areas;

EMERGENCY AND FIRST AID PROCEDURES

Inhalation: remove to fresh air; Eyes: flush immediately with large amount of water for 15 minutes, contact physician; Skin: wash with soap & water; Ingestion: DO NOT induce vomiting, contact physician immediately.

Section VI — REACTIVITY DATA

STABILITY [ ] UNSTABLE [XX] STABLE CONDITIONS TO AVOID

INCOMPATABILITY (*Materials to avoid*) None

HAZARDOUS DECOMPOSITION PRODUCTS

None

AS-231

HAZARDOUS POLYMERIZATION [ ] MAY OCCUR [XX] WILL NOT OCCUR

CONDITIONS TO AVOID Avoid exposure to open flame or sparks, & application in unventillated areas.

Section VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Shut off leak, dike up spill. Use oil absorbent material for cleanup. Spills should be kept clear of spraks and open flame.

WASTE DISPOSAL METHOD Do not dispose in sewers, streams, etc.; follow Federal standards.

Section VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

Chemical cartridge respirator with organic vapor cartridge, and full face piece.

VENTILATION

Open

PROTECTIVE GLOVES Rubber, oil resistant

EYE PROTECTION Chemical splash goggles

OTHER PROTECTIVE EQUIPMENT Face shield

Section IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Product should not be stored at elevated temperatures. Protect against eye contact.

OTHER PRECAUTIONS

Avoid exposure to open flame or sparks. Avoid application in unventillated areas.

F PREP.
ctober 5, 1988

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

Section I

UFACTURER'S NAME Watson Protective Coatings, Inc.

REET ADDRESS 325 Paul Avenue CITY, STATE, AND ZIP CODE St. Louis, MO 63135

MERGENCY TELEPHONE NO. (314) 521-2000

DUCT CLASS Modified Calcium Sulphonate MANUFACTURERS CODE IDENTIFICATION AS236B

DE NAME Armor Shield 236 Black

Section II — HAZARDOUS INGREDIENTS

REDIENT	PERCENT	TLV PPM	TLV mg/M³	LEL	VAPOR PRESSURE
Aliphatic Hydrocarbon	100	350	525		2.0

Section III — PHYSICAL DATA

OILING RANGE 350° - 395°F VAPOR DENSITY [XX] HEAVIER [ ] LIGHTER THAN AIR

VAPORATION RATE [ ] FASTER [XX] SLOWER THAN ETHER PERCENT VOLATILE BY VOLUME 49.84 WEIGHT PER GALLON 8.67

Section IV — FIRE AND EXPLOSION HAZARD DATA

OT CATEGORY Combustible FLASH POINT 125°F LEL

NGUISHING MEDIA

Carbon dioxide or dry extinguisher for small fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

SPECIAL FIRE FIGHTING PROCEDURES

Water spray may be used to reduce rate of burning and for cooling containers.

OLD LIMIT VALUE See Section II

CTS OF OVEREXPOSURE

Inhalation -Anesthetic. Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, headach, or staggering. Prolong skin or eye contact - primary irritation is redness or tearing, and may lead to extraction of natural oils.

MERGENCY AND FIRST AID PROCEDURES

Fumes - remove from exposure and restore breathing. Keep warm and quite. Notify a physician. Splash (eyes) - flush immediately with copious quantities of running water for at least 15 minutes. Take to a physician for definitive medical treatment. Splash (skin) - wash effected areas with water. Consult a physician.

Section VI — REACTIVITY DATA

BILITY [ ] UNSTABLE [X] STABLE CONDITIONS TO AVOID

COMPATABILITY (Materials to avoid)

AZARDOUS DECOMPOSITION PRODUCTS

AS-236

AZARDOUS POLYMERIZATION [ ] MAY OCCUR [Y] WILL NOT OCCUR

NDITIONS TO AVOID N/A

Section VII — SPILL OR LEAK PROCEDURES

TEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition flames, hot surfaces and electrical, static, or frictional sparks. Avoid breathing vapors. Ventilate area. Remove with inert absorbent and non-sparking tools.

WASTE DISPOSAL METHOD

Dispose on accordance with local, state, and federal regulations. Incinerate in approved facility. Do not incinerate closed containers.

Section VIII — SPECIAL PROTECTION INFORMATION

SPIRATORY PROTECTION

In outdoor or open areas, use Bureau of Mines approved mechanical filter respirator to remove solid air borne particles of overspray during spray application. In restricted ventilation areas use Bureau of Mines approved chemical-mechanical filters designed to remove a combination or particulate and gas and vapor. In confined areas, use Bureau of Mines approved air line type respirator or hoods.

ENTILATION

Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of most ingredients in SECTION II below acceptable limit, LEL in SECTION IV below stated limit, and to remove decomposition products during welding or flame cutting surfaces coated with this product.

OTECTIVE GLOVES Required for prolonged or repeated contact.

PROTECTION Use safety eyewear designed to protect against splash of liquids.

ER PROTECTIVE EQUIPMENT Prevent prolonged skin contact to contaminated clothing.

Section IX — SPECIAL PRECAUTIONS

CAUTIONS TO BE TAKEN IN HANDLING AND STORING

Do not store above 120°F. Store large quantities in buildings designed and protected for storage of NFPA Class B Flammable/combustible liquids.

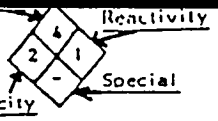
ER PRECAUTIONS

Do not take internally. Containers should be grounded when pouring. Avoid free fall or liquids in excess of a few inches. Do not flame cut, braze, or weld without U.S. Bureau of Mines approved respirator or appropriate ventilation.

21 NEWPORT AVE., QUINCY, MASS. 02171

Z.R.C. COLD GALVANIZING COMPOUND (AEROSOL)

4 = Extreme
3 = High
2 = Moderate
1 = Slight
0 = Insignificant



4/11/88

Section I

MANUFACTURER'S NAME: Z.R.C. Products Company

STREET ADDRESS: 21 Newport Ave., Quincy, Mass., 02171

TELEPHONE NO.: (617) 328 6700

DATE OF PREPARATION: March 1st 1988

PRODUCT CLASS: Esterified epoxy zinc rich metal primer

MANUFACTURER'S CODE IDENTIFICATION: 8281-10000

TRADE NAME: Z.R.C. Cold Galvanizing Compound (Aerosol)

Section II – HAZARDOUS INGREDIENTS

INGREDIENT (CAS#)	PERCENT by weight	LEL	TLV ppm	TLV (mg/M^3)	PEL ppm	PEL (mg/M^3)	VAPOR PRESSURE mm @ 20°C
Aerosol contents at 55+5psi			ACGIH Values		OSHA Values		
Methyl Ethyl Ketone (CAS# 78-93-2)	20	1.8	TWA 200 STEL 300	(590) (885)	TWA 200	(590)	75
Zinc (CAS# 7440-66-6)	38.4	na			TWA (Dust) 50 (Mppcf)	(15)	na
Zinc Oxide (CAS# 1314-13-2)	1.6	na	TWA (fume) TWA (dust) STEL(fume)	(5) (10) (10)	TWA (Fume)	(5)	na
Xylene (CAS# 1330-20-7)	10	1.0	TWA 100 STEL 150	(435) (655)	TWA 100	(435)	6
n-Butyl Acetate (CAS# 123-86-4)	5	1.7	TWA 150 STEL 200	(710) (950)	TWA 200	(950)	9
Propane (CAS# 74-98-6)	10	2.3	TWA 1000	(1800)	TWA 1000	(1800)	(123psia @70°F)
Isobutane (CAS# 75-28-5)	10	1.8	TWA 1000	(1800)	TWA 1000	(1800)	(45psia @70°F)

Section III – PHYSICAL DATA – FIRE AND EXPLOSION HAZARD DATA

BOILING RANGE -42.1 to 144°C

VAPOR DENSITY ☐ LIGHTER THAN AIR ☒ HEAVIER THAN AIR

EVAPORATION RATE ☐ SLOWER THAN ETHER ☒ FASTER THAN ETHER *Propellant

PERCENT VOLATILE BY VOLUME weight 54%

WEIGHT PER GALLON 9.5

SPECIFIC GRAVITY 1.14

VAPOR PRESSURE 50 ± 10mm @ 21°C

FLASH POINT Below 20°F (-7°C) (T.O.C.)

FLAMMABILITY LIMITS IN AIR UEL 66.4% LEL 0.9%

FLAMMABILITY CLASSIFICATION DOT Consumer Commodity - Hazard Class ORM-D-AIR Flammable Class 1A. OSHA Class 29(1910-106a) OSHA Label: Extremely Fammable - RSP. CFR-16-1500.3(6) (V)

AUTO IGNITION TEMPERATURE Not Determined

SOLUBILITY IN WATER Insignificant

REACTIVITY IN WATER See Section IV

APPEARANCE AND ODOR Grey liquid with odor typical of aliphatic and aromatic hydrocarbons mixed with ketone.

EXTINGUISHING MEDIA Approved Class B Fire Extinguisher, foam or dry chemical. DO NOT USE WATER. Combustion in a limited amount of air can generate toxic carbon monoxide. Use full protective equipment and self-contained breathing apparatus for respiratory protection in fighting fires in enclosures. In a fire situation or when the material is heated it becomes a highly flammable liquid with a moderate explosion hazard. Once ignited the product will burn readily in air.

UNUSUAL FIRE AND EXPLOSION HAZARDS Keep containers closed tightly. Isolate from heat, electrical equipment, sparks and open flame. Zinc present in a finely divided form, is hazardous when atomized in air and, if sparked, an explosion is possible.. Closed containers may burst or explode when exposed to heat. Application to hot surfaces requires special precautions. During emergency conditions, overexposure to decompostion products (gaseous oxides of carbon and nitrogen) may cause a health hazard. Symptoms of these exposures may not be immediately apparent. Obtain medical attention. Heavier than air vapors may flow along surfaces to distant ignition sources and flash back. Moisture and acid contamination can result in hydrogen gas evolution causing cans to bulge with increased pressure. Cans so deformed should not be moved, opened or punctured. Call (617) 328-6700. See also Sections IV and V.

SPECIAL FIRE FIGHTING PROCEDURES DO NOT USE WATER IN ANY FORM. Water may be used to cool closed containers to prevent pressure build up and possible autoignition or explosion when exposed to extreme heat, but care should be taken to prevent water access to wet paint and spray residues. See also Section VII.

*CAS #s are identification numbers assigned by Chemical Abstract Service for reference to hazardous information on file at the American Chemical Society. For information call 1-800-848-6538. For health emergencies call Poison Control Center (24 hours) at 1-213-664-2121. for transporation emergencies call CHEMTREC 1-800-424-9300.

MATERIALS AND CONDITIONS TO AVOID This material is considered to be stable under its normal handling and storage conditions. It can react violently with strong oxidizing agents such as chlorine, oxygen, as well as water, weak and concentrated acids and alkalies. Store in dry areas away from oxidizing agents (chlorine, oxygen), all acids, alkalies and water. Avoid dusting and accumulations of spray residues.

HAZARDOUS DECOMPOSITION PRODUCTS Thermal degradation and water and alkali contact may produce hydrogen accompanied with additional risks of explosion and fire. May produce fumes of zinc oxides and the oxides of carbon and nitrogen when the product is heated to decomposition. Acid contact will produce hydrogen.

Section V – HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE 100 ppm

OSHA PERMISSABLE EXPOSURE LIMIT Mixture. (see Section II)

PRIMARY ROUTE OF ENTRY Inhalation and skin contact

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE Respiratory, brain and central nervous system conditions, dermatitis and other skin afflictions.

SIGNS AND SYMPTOMS OF OVER-EXPOSURE

Propane is an asphyxiant. Solvents contained in the mixture are central nervous system depressants. Symptoms of over-exposure include drowsiness, dizziness, headache, slurred speech, intoxication with euphoria and/or depression leading to stupor and unconsciousness. Nose and throat irritation may occur from inhalation. Skin contact may cause defatting and dermatitis. Eye contact with the liquid causes tears, burning, irritation, conjunctivitis. Ingestion will cause poisoning and may be fatal; Avoid aspiration if ingested. Do not induce vomiting. Lung contact may cause chemical pneumonitis. During welding and burning operations hazardous decomposition products may be evolved from the dried film. These may include but not be limited to zinc oxides as well as the gaseous oxides of carbon and nitrogen. Excessive inhalation of these fumes may produce symptoms known as fume fever and "zinc shakes" among other effects. Consult physician. b.) Chronic: Reports have associated repeated and prolonged overexposure to solvents with permanent damage to brain and central nervous system Note: Minor embryotoxic/fetotoxic effects have been reported in one unconfirmed study of methyl ethyl ketone as being observed in laboratory rats exposed to over 1000 ppm of the pure solvent for most of the gestation period by the inhalation route (5x the OSHA PEL/TWA).

EMERGENCY AND FIRST AID PROCEDURES

1.) Inhalation: Remove to fresh air.Keep warm and quiet. Give artificial respiration if required. Get medical assistance. 2.) Eyes: Wash eyes immediately with large amounts of water for at least 15 minutes. Take to physician for medical attention. 3.) Skin: Wash contact area promptly with soap and water. Promptly remove paint wet clothing. Consult physician if irritation persists. 4.) Ingestion: Do not induce vomiting without medical advice. Consult a physician, emergency room or Poison Center immediately. Observe all rules of good hygiene during and after use. Wash thoroughly before smoking or eating.

Section VI – SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION In outdoor or open areas with unrestricted ventilation,use approved high efficiency mechanical respirator to remove particles of overspray during spray application. In areas of restricted,ventilation,use high efficiency chemical/mechanical filters designed to remove a combination of particulates and vapor. In confined areas,use approved air line type respirators or hoods.

VENTILATION Work place areas require exhaust ventilation in accordance with OSHA regulation 29 CFR Part 1910 (1070) to maintain vapor levels below the TLV (especially during spraying, misting, or heating). Use an approved high efficiency respirator of the full face canister type (for limited time and concentrations), air supplied type of self-contained type respirators (for extended exposures involving high or unknown vapor concentrations or for non-routine or emergency conditions). Exhaust levels should be maintained at least 100 lfm.

PROTECTIVE GLOVES Neoprene gloves and aprons should be used to prevent prolonged or repeated skin contact. Use protective creams when skin contact is likely.

EYE PROTECTION Safety goggles with unperforated side shields or face shield should be used where splashing of solvent into eyes is possible. An eye wash fountain should also be available in areas where splashing is probable. When large amounts of material are used a safety shower should be available.

OTHER PROTECTIVE EQUIPMENT Ventilation equipment should be explosion-proof, and any tools used in the area should be of the non-sparking type. Wear chemical resistant boots. Remove and wash or discard contaminated clothing.

Section VII – SPECIAL PRECAUTIONS – SPILL OR LEAK PROCEDURES

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE This extremely flammable liquid should be stored in a cool, clean, well ventilated fire resistant storage room or in a solvent storage cabinet that meets OSHA requirements. Do not store in direct sunlight. Store large quantities only in buildings in compliance with OSHA 1910.105. Areas of use and storage for this material should have a good ventilation and all sources of open flame and high heat should be excluded. Prohibit smoking in these areas. Ensure sufficient ventilation to prevent accumulation of heavy vapors in low lying areas or sumps. Avoid prolonged contact with skin. Do not puncture, drag or slide container. Do not store above 120°F.

OTHER PRECAUTIONS Any deformed cans should not be moved, opened or punctured., call (617) 328-6700. Do not take internally. Keep away from children. Empty container may contain extremely flammable residues and explode if heated.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED For massive spills, evacuate the area. For all spills eliminate ignition sources. Dike and contain spills with dry inert materials (sand, earth, etc.). Eliminate all sources of moisture, and do not use water in clean up operations. Recover as much of the free liquid as possible for disposal, and use an absorbent to pick up the residue. Avoid discharging paint directly into a sewer or surface waters. Do not flush spills with water. Use non-sparking tools only. Spilled material may be slippery on floors.

WASTE DISPOSAL METHOD Dispose of the absorbed material or the free waste liquid in dry containers. Dispose of all materials including empty cans according to local, state and federal regulations. DO NOT INCINERATE, do not flush to sewers. Containers may explode if heated even when empty. It is recommended that solid waste be landfilled only at approved hazardous disposal sites using approved contractors.

DISCLAIMER: While the data and suggestions contained herein are based on information we believe to be reliable, it is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

THIS PRODUCT IS A MIXTURE, AND MSDS FILES ON THE INDIVIDUAL