ACT 64 INSPECTION REPORT

U.S. EPA I.D. NUMBER M I D 0 0 6 4 1 1 0 2 9
(or Michigan)

FACILITY NAME FLEET ENGINEERS, INC.
1900 E. KEATING AVENUE
MUSKEGON
MICHIGAN 49442
CITY ZIP CODE

DATE JANUARY 5, 1987 TIME OF INSPECTION (FROM) 9:30A (TO) 11:30A

PERSON(S) INTERVIEWED	TITLE	TELEPHONE
STEVE ANTEKEIER	MANAGER - ENGINEERING	616-777-2337

INSPECTOR(S)	AGENCY/TITLE	TELEPHONE
DALE DEKRAKER	MI - DNR	616-456-5071

Primary Business of this Facility: COMPANY MANUFACTURES METAL PARTS FOR SEMI-TRAILERS. PROCESSES INCLUDE STAMPING, CLEANING AND PAINTING

Reason for Inspection:

✓ Routine _____ Follow-up _____ Complaint

INSPECTION FORMS:

FORM

Based upon the inspection, this facility:

- ____ is a non-generator/conditionally exempt small quantity generator — A
- ____ small quantity generator — A
- X generator — B
- ____ transporter — C
- ____ treatment/storage/disposal facility — D

Date of Last Inspection 6-17-83

JES 7-20-83
Code O

EPA

RCRA Inspection Report

EPA Identification Number: M I D 0 0 6 4 1 1 0 2 9

Installation Name: Fleet Engineers

Location Address: 1800 E. Keating Ave.

City: Muskegon State: MI

Date of inspection: 6-17-83 Time of inspection (from) 1342 (to) _____

Person(s) interviewed	Title	Telephone
Steve Antekeier	Manager-Engineering	(616) 777-2537

Inspector(s)	Agency/Title	Telephone
Elizabeth A. Bols	MDNR/Env. San.	(616) 456-5071

Installation Activity (mark only one box)	Inspection Form(s)
☐ Treatment/Storage/Disposal per 40 CFR 265.1 and/or Generation and/or Transportation	A
☐ Treatment/Storage/Disposal (no generation or Transportation)	A
☐ Generation and Transportation	B, C
☐ Generation only	B
☐ Transportation only	C

G

non-generator - steel stamping house - parts for auto industry
mostly trucks

wastes generated (non-hazardous)

degree w/ an alkaline solution - pH 10-12
non-EP toxic water base paint
2-tanks w/ alkaline solution
1- tank w/ iron phophate
1- " " non-chromic rinse
} dip parts in which are covered w/ a water soluable cutting oil

Please print or type with ELITE type (12 characters/inch) in the unshaded areas only.

Form Approved OMB No. 158-S79016
GSA No. 0246-EPA-OT

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act).*

INSTALLATION'S EPA I.D. NO.	MID006411029
I. NAME OF INSTALLATION	FLEET ENGINEERS INC
II. INSTALLATION MAILING ADDRESS	~~PO BOX 4347~~ 1800 KEATING AVE MUSKEGON, MI ~~49444~~ 49442
III. LOCATION OF INSTALLATION	1800 E KEATING MUSKEGON, MI ~~49444~~ 49442

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER	APPROVED	DATE RECEIVED (yr., mo., & day)
S F MID006411029 T/A 2 C 1	A	800715

000056

I. NAME OF INSTALLATION

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: C 3

CITY OR TOWN: C 4 | ST. | ZIP CODE

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: C 5

CITY OR TOWN: C 6 | ST. | ZIP CODE

IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*: C 2 HERLEIN D K ASST PRES

PHONE NO. *(area code & no.)*: 616-777-2537

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: C 8 LOUIS E EKLUND

DETACH

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*

F = FEDERAL
M = NON–FEDERAL

M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*

- [X] A. GENERATION
- [ ] B. TRANSPORTATION *(complete item VII)*
- [ ] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION *(transporters only – enter "X" in the appropriate box(es))*

- [ ] A. AIR
- [ ] B. RAIL
- [ ] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER *(specify)*:

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION *(complete item C)*

C. INSTALLATION'S EPA I.D. NO.: MID006411029

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

JUL 15 1980

CONTINUE ON REVERSE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

DATE: 8/29/83 Bichett

5WMB

RE: Installation Name Fleet Engineers

194 Installation Address Muskegon MI

EPA ID# MID006411029 G

FROM: Versar

TO: Unit Chiefs

NON-HANDLER INACTIVE I.D. # 9/2/83 MGP

Attached for your review is a copy of letter reclassifying waste

for the above-referenced facility.

Cover letter date 8/23/83

Rec'd in Region 8/26/83

Rec'd in Versar 8/26/83

Action required

Reviewer's summary:

Does he need an ID#?

pH < 12.5; thus waste is not corrosive & does not contain heavy metals. Therefore, an ID # is no longer required under RCRA.

Wm E Munro

PLEASE RETURN THIS FORM ALONG WITH ALL RELATED MATERIAL TO LISA BINDER

8/31/83

FLEET ENGINEERS

INCORPORATED

AREA (616) 777-2537 • 1800 E. KEATING AVE. • MUSKEGON, MICHIGAN 49442

August 23, 1983

RECEIVED
AUG 26 1983
WASTE MANAGEMENT BRANCH
EPA, REGION V

RCRA Activities
U.S. EPA Region V
P.O. Box A-3587
Chicago, IL 60690

NON-HANDLER INACTIVE I.D. # 9/2/83 MOS

MID 006 411029 G

Dear Sirs:

As of March 1, 1983, we are reclassifying our generated waste from hazardous Act 64 to non-hazardous Act 136. On this date we have discontinued using "Dufix" which is a DuBois Chemicals proprietary name for a chromic acid rinse (rated hazardous) to a chemical called "Secure Seal" which is a non-chromic rinse (rated non-hazardous).

The four chemicals that we currently use that generate waste are:

1) Thermo Sprex - alkaline heavy duty cleaner.
   (used in our parts cleaning process)
2) Dura Guard 25 - iron phosphate rinse.
   (used in our parts cleaning process)
3) Secure Seal - non-chromic rinse.
   (used in our parts cleaning process)
4) Red Oxide Primer - used for painting.

Data sheets enclosed on the above.

The waste we generate is the combination of these chemicals, along with any suspended solids (dirt from cleaning) and water soluble cutting oils, which are pumped into one large tank after the titration level becomes too low for our cleaning process tanks. This liquid is then hauled away and disposed of by licensed facilities.

The PH level of our liquid waste is 11.9 as tested on a Chemtrix Type 40 E PH meter, calibrated with a 7.0 and 10.0 PH buffer solution.

I trust this information is sufficient to reclassify Fleet Engineers as a non-hazardous waste generator and placed into the Act 136 classification.

Sincerely,

FLEET ENGINEERS, INC.

Steve Antekeier

Steve Antekeier
Manager - Engineering

CC: Michigan Department of Natural Resources
Attn: Elizabeth Bols
State Office Building, 6th Floor
350 Ottawa Street, N.W.
Grand Rapids, MI 49503

RECEIVED 8/24/83

SA:jr

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME: DuBois Chemicals, Div. of Chemed Corp.	EMERGENCY TELEPHONE NO.: (513) 769-4200
ADDRESS (Number, Street, City, State, and ZIP Code): 3630 E. Kemper Road, Sharonville, Ohio 45241	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS: THERMO SPREX
CHEMICAL FAMILY: Alkaline heavy-duty cleaner	FORMULA

SECTION II — HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Caustic alkali	45	2 mg/M^3

SECTION III — PHYSICAL DATA

BOILING POINT (°F.)	N/A	SPECIFIC GRAVITY (H_2O = 1)	Powder
VAPOR PRESSURE (mm Hg.)	None	PERCENT, VOLATILE BY VOLUME (%)	0
VAPOR DENSITY (AIR = 1)	N/A	EVAPORATION RATE (n-butyl acetate = 1)	< 1
SOLUBILITY IN WATER	10-15%		
APPEARANCE AND ODOR	Tan to brown powder; mild odor		

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	None	FLAMMABLE LIMITS	Lel: None	Uel: None
EXTINGUISHING MEDIA	CO_2, foam			

SPECIAL FIRE FIGHTING PROCEDURES

None

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

(Continued on reverse side)

Form OSHA-20
Rev. May 72
F-1465 1174

DuBOIS CHEMICALS, DIVISION OF CHEMED CORPORATION

SECTION V — HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: See Section 11

EFFECTS OF OVEREXPOSURE: None

EMERGENCY AND FIRST AID PROCEDURES

Flush from skin with water; flush eyes thoroughly with water for at least 15 minutes and get medical attention.

SECTION VI — REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	XX	None known
INCOMPATABILITY *(Materials to avoid)*	Concentrated mineral acids		
HAZARDOUS DECOMPOSITION PRODUCTS	CO, SO_2 with incomplete combustion		
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	XX	None known

SECTION VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Flush small amounts to drain; collect and return large amounts to container.

WASTE DISPOSAL METHOD

pH adjustment; no phosphates

SECTION VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*

VENTILATION	LOCAL EXHAUST	SPECIAL	None
	MECHANICAL *(General)* Yes	OTHER	None
PROTECTIVE GLOVES	alkali resistant	EYE PROTECTION	Face shield
OTHER PROTECTIVE EQUIPMENT	None		

SECTION IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store in dry place; keep container closed.

OTHER PRECAUTIONS

DOT CORROSIVE

Michigan Water Resources Commission

CRITICAL MATERIALS REGISTER

Published October 1, 1980

PRODUCT NAME THERMO SPREX

SOURCE DuBois Chemicals CONVERSION FACTOR 9-10 LBS./GAL.

THERMO SPREX does not contain any of the items listed here.

I. Inorganic Materials

A. The following inorganic materials and *all their compounds* are to be reported.

	% Wt.
antimony	
arsenic	
beryllium	
cadmium	
chromium	
cobalt	
copper	
cyanides	
hypochlorite	
lead	
lithium	
mercury	
nickel	
selenium	
silver	
zinc	

B. The following specific inorganic materials are to be reported (do not report compounds).

	% Wt.
chloramines	
chlorine	
hydrazine	
hydrogen sulfide	

II. Organic Materials

	% Wt.
acetone cyanohydrin	
2-acetylaminofluorene	
acrolein	
acrylic acid	
acrylonitrile	
allyl chloride	
* 2-aminoanthraquinone	
aminoazobenzene	
* o-aminoazotoluene	
4-aminobiphenyl	
* 3-amino-9-ethylcarbazole	
* 1-amino-2-methylanthraquinone	
aminotriazole (amitrole)	
aniline	
* aniline hydrochloride	
o-anisidine	
* o-anisidine hydrochloride	
benz(a)anthracene	
benzene	
benzidine	
benzidine salts	
benzo(a)pyrene	
brucine	
carbon tetrachloride	
chlorinated dibenzofurans	
chlorinated dioxins	
1-chloro-2,3-epoxypropane	
bis(2-chloroethyl)ether	
chloroform	
bis(2-chloromethyl)ether	
* 3-(chloromethyl)pyridine hydrochloride	
1-(4-chlorophenyl)-3, 3-dimethyl triazene	
* 4-chloro-m-phenylenediamine	
* 4-chloro-o-pheylenediamine	
chloroprene	
* 5-chloro-o-toluidine	
* p-cresidine	
* 2,4-diaminoanisole sulfate	
* 4,4'-diaminodiphenyl ether	
* 2,4-diaminotoluene	
dibenz(a,h)anthracene	
tris(dibromopropyl)phosphate	
di-n-butyl phthalate	
3,3'-dichlorobenzidine	
3,3'-dichlorobenzidine salts	
1,2-dichloroethane	
1,2:3,4-diepoxybutane	
* diethyl sulfate	
4-dimethylaminoazobenzene	
dimethylhydrazines	
4,6-dinitro-o-cresol	
2,4-dinitrophenol	
2,4-dinitrotoluene	
di-n-octyl phthalate	
* 1,4-dioxane	
2,3-epoxy-1-propanal	
ethylene dibromide	
ethyleneimine	
* ethylene oxide	
ethylene thiourea	
bis(2-ethylhexyl)phthalate	
* ethylmethanesulfonate	
* 2-(2-formylhydrazino)-4-(5-nitro-2-furyl)-thiazole	
hexachlorobenzene (HCB)	
hexachlorobutadiene	
hexachlorocyclohexane	
hexachlorocyclopentadiene	
hexachloroethane	
hydrazobenzene	
hydroquinone	
N-(2-hydroxyethyl)ethyleneimine	
lactonitrile	
* malachite green	

* indicates new critical material

Organic Materials (continued)	% Wt.
methylenebis(2-chloroaniline)	
* 4,4'-methylenebis(2-methylaniline)	
* 4,4'-methylenebis(N,N-dimethylaniline)	
1,2(methylenedioxy)-4-propenyl benzene	
methyl hydrazine	
1-methylnaphthalene	
* 2-methyl-1-nitroanthraquinone	
* mustard gas	
* 1,5-naphthalenediamine	
1-naphthylamine	
2-naphthylamine	
* 5-nitroacenaphthene	
* 5-nitro-o-anisidine	
4-nitrobiphenyl	
* nitrogen mustard	
* N-nitroso-n-butyl-N-(4-hydroxybutyl) amine	
N-nitrosodiethylamine	
N-nitrosodimethylamine	
* p-nitrosodiphenylamine	
* N-nitroso-N-ethylurea	
* N-nitroso-N-methylurea	
* N-nitroso-N-methylurethane	
* N-nitrosomethylvinylamine	
* N-nitrosomorpholine	
* N-nitroso-N-phenylhydroxylamine, ammonium salt	

	% Wt.
* N-nitrososarcosine	
pentachloronitrobenzene	
pentachlorophenol	
peroxyacetic acid	
* piperonyl sulfoxide	
polybrominated biphenyls (PBB)	
polychlorinated biphenyls (PCB)	
1,3-propane sultone	
β-propiolactone	
* 5-propyl-1,3-benzodioxole	
propyleneimine	
semicarbazide	
styrene	
tetrachloroethylene (perchloroethylene)	
* thioacetamide	
* 4,4'-thiodianiline	
thiourea	
* o-toluidine	
* o-toluidine hydrochloride	
triaryl phosphate esters	
1,1,2-trichloroethane	
trichloroethylene	
* trichlorophenols	
* 2,4,5-trimethylaniline	
* trimethylphosphate	
* xylene	

U.S. DEPARTMENT OF LAI
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME DuBois Chemicals, Division of Chemed Corporation	EMERGENCY TELEPHONE NO. (513) 769-4200
ADDRESS *(Number, Street, City, State, and ZIP Code)* 3630 E. Kemper Road, Sharonville, Ohio 45241	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS DURA GARD 25
CHEMICAL FAMILY Metal treating compound	FORMULA

SECTION II — HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES		%	TLV (Units)
Sodium nitrate	(200 mg/kg oral/rat)	10	

SECTION III — PHYSICAL DATA

BOILING POINT (°F.)	None	SPECIFIC GRAVITY ($H_2O = 1$)	1.1 to 1.2
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT, VOLATILE BY VOLUME (%)	0
VAPOR DENSITY (AIR = 1)	N/A	EVAPORATION RATE (n-butyl acetate = 1)	<1
SOLUBILITY IN WATER	10 %		
APPEARANCE AND ODOR	White powder; mild odor		

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	None	FLAMMABLE LIMITS	Lel None	Uel None
EXTINGUISHING MEDIA	CO_2, foam			
SPECIAL FIRE FIGHTING PROCEDURES				
None				
UNUSUAL FIRE AND EXPLOSION HAZARDS				
Nitrate is an oxidizing agent				

(Continued on reverse side)

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F-1465 1174

DuBOIS CHEMICALS, DIVISION OF CHEMED CORPORATION

W. J. Corbett

W. J. Corbett

December 29, 1975

SECTION V — HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: See Section II

EFFECTS OF OVEREXPOSURE: None

EMERGENCY AND FIRST AID PROCEDURES

Flush skin with water; flush eyes with water for at least 15 minutes and get medical attention.

SECTION VI — REACTIVITY DATA

STABILITY
- UNSTABLE — CONDITIONS TO AVOID: None known
- STABLE: XXX

INCOMPATABILITY *(Materials to avoid)*: Concentrated alkalis

HAZARDOUS DECOMPOSITION PRODUCTS: CO with incomplete combustion

HAZARDOUS POLYMERIZATION
- MAY OCCUR — CONDITIONS TO AVOID: None known
- WILL NOT OCCUR: XXX

SECTION VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Sweep up and discard small amounts - collect and return large amounts to container.

WASTE DISPOSAL METHOD

pH adjustment; contains phosphates

SECTION VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*: None

VENTILATION
- LOCAL EXHAUST: Yes — SPECIAL: None
- MECHANICAL *(General)* — OTHER: None

PROTECTIVE GLOVES: non-absorbent — EYE PROTECTION: Face shield when handling.

OTHER PROTECTIVE EQUIPMENT: None

SECTION IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store in cool place. Keep cover on container.

OTHER PRECAUTIONS

Voluntary; cautions on container label.

Michigan Water Resources Commission

CRITICAL MATERIALS REGISTER

Published October 1, 1980

PRODUCT NAME DURA GARD 25

SOURCE DuBois Chemicals CONVERSION FACTOR 9-10 LBS./GAL.

DURA GARD 25 does not contain any of the items listed here.

Inorganic Materials

A. The following inorganic materials and *all their compounds* are to be reported.

% Wt.

antimony .....
arsenic .....
beryllium .....
cadmium .....
chromium .....
cobalt .....
copper .....
cyanides .....
hypochlorite .....
lead .....
lithium .....
mercury .....
nickel .....
selenium .....
silver .....
zinc .....

B. The following specific inorganic materials are to be reported (do not report compounds).

% Wt.

chloramines .....
chlorine .....
hydrazine .....
hydrogen sulfide .....

Organic Materials

% Wt.

acetone cyanohydrin .....
2-acetylaminofluorene .....
acrolein .....
acrylic acid .....
acrylonitrile .....
allyl chloride .....
* 2-aminoanthraquinone .....
aminoazobenzene .....
* o-aminoazotoluene .....
4-aminobiphenyl .....
* 3-amino-9-ethylcarbazole .....
* 1-amino-2-methylanthraquinone .....
aminotriazole (amitrole) .....
aniline .....
* aniline hydrochloride .....
o-anisidine .....
* o-anisidine hydrochloride .....
benz(a)anthracene .....
benzene .....
benzidine .....
benzidine salts .....
benzo(a)pyrene .....
brucine .....
carbon tetrachloride .....
chlorinated dibenzofurans .....
chlorinated dioxins .....
1-chloro-2,3-epoxypropane .....
bis(2-chloroethyl)ether .....
chloroform .....
bis(2-chloromethyl)ether .....
* 3-(chloromethyl)pyridine hydrochloride .....
1-(4-chlorophenyl)-3, 3-dimethyl triazene .....
* 4-chloro-m-phenylenediamine .....
* 4-chloro-o-pheylenediamine .....
chloroprene .....
* 5-chloro-o-toluidine .....

% Wt.

* p-cresidine .....
* 2,4-diaminoanisole sulfate .....
* 4,4'-diaminodiphenyl ether .....
* 2,4-diaminotoluene .....
dibenz(a,h)anthracene .....
tris(dibromopropyl)phosphate .....
di-n-butyl phthalate .....
3,3'-dichlorobenzidine .....
3,3'-dichlorobenzidine salts .....
1,2-dichloroethane .....
1,2:3,4-diepoxybutane .....
* diethyl sulfate .....
4-dimethylaminoazobenzene .....
dimethylhydrazines .....
4,6-dinitro-o-cresol .....
2,4-dinitrophenol .....
2,4-dinitrotoluene .....
di-n-octyl phthalate .....
* 1,4-dioxane .....
2,3-epoxy-1-propanal .....
ethylene dibromide .....
ethyleneimine .....
* ethylene oxide .....
ethylene thiourea .....
bis(2-ethylhexyl)phthalate .....
* ethylmethanesulfonate .....
* 2-(2-formylhydrazino)-4-(5-nitro-2-furyl)-thiazole .....
hexachlorobenzene (HCB) .....
hexachlorobutadiene .....
hexachlorocyclohexane .....
hexachlorocyclopentadiene .....
hexachloroethane .....
hydrazobenzene .....
hydroquinone .....
N-(2-hydroxyethyl)ethyleneimine .....
lactonitrile .....
* malachite green .....

* indicates new critical material

Organic Materials (continued) % Wt.

methylenebis(2-chloroaniline) .....
* 4,4'-methylenebis(2-methylaniline) .....
* 4,4'-methylenebis(N,N-dimethylaniline) .....
1,2(methylenedioxy)-4-propenyl benzene .....
methyl hydrazine .....
1-methylnaphthalene .....
* 2-methyl-1-nitroanthraquinone .....
* mustard gas .....
* 1,5-naphthalenediamine .....
1-naphthylamine .....
2-naphthylamine .....
* 5-nitroacenaphthene .....
* 5-nitro-o-anisidine .....
4-nitrobiphenyl .....
* nitrogen mustard .....
* N-nitroso-n-butyl-N-(4-hydroxybutyl) amine .....
N-nitrosodiethylamine .....
N-nitrosodimethylamine .....
* p-nitrosodiphenylamine .....
* N-nitroso-N-ethylurea .....
* N-nitroso-N-methylurea .....
* N-nitroso-N-methylurethane .....
* N-nitrosomethylvinylamine .....
* N-nitrosomorpholine .....
* N-nitroso-N-phenylhydroxylamine, ammonium salt .....

* N-nitrososarcosine .....
pentachloronitrobenzene .....
pentachlorophenol .....
peroxyacetic acid .....
* piperonyl sulfoxide .....
polybrominated biphenyls (PBB) .....
polychlorinated biphenyls (PCB) .....
1,3-propane sultone .....
β-propiolactone .....
* 5-propyl-1,3-benzodioxole .....
propyleneimine .....
semicarbazide .....
styrene .....
tetrachloroethylene (perchloroethylene) .....
* thioacetamide .....
* 4,4'-thiodianiline .....
thiourea .....
* o-toluidine .....
* o-toluidine hydrochloride .....
triaryl phosphate esters .....
1,1,2-trichloroethane .....
trichloroethylene .....
* trichlorophenols .....
* 2,4,5-trimethylaniline .....
* trimethylphosphate .....
* xylene .....

August 5, 1982

RESEARCH LABORATORY/TECHNICAL DATA

SECURE SEAL

GENERAL DESCRIPTION:

SECURE SEAL is a highly concentrated liquid, non-chromated final rinse to be used after phosphatizing. SECURE SEAL is designed for use in spray washers or immersion tanks. SECURE SEAL provides a sealing action that improves paint adhesion and extends resistance to humidity and salt spray.

PROPERTIES:

APPEARANCE	Straw colored, heavy liquid
SOLUBILITY	Immediate and complete
ODOR	Mild
FOAM	Low
BIODEGRADABILITY	Yes, all surfactants
SPECIFIC GRAVITY	1.266 (10.54 lbs./gallon)
CONCENTRATION	1 quart per 100 gallons
pH	4.5 - 5.5

TITRATION:

Take 50 ml. of tank solution and add 3 drops of phenolphthalein indicator. Titrate with 2N NaOH. Six drops equals 1 quart per 100 gallons.

MAINTENANCE:

The tank life of the SECURE SEAL depends on a number of factors. The two most important are the work load and the amount of contamination carried in from the preceding rinse.

Tanks 500 gallons should be dumped once a week.

Tanks 1,000 gallons should be dumped every two weeks.

Larger tanks can be dumped less frequently.

The solution pH can be checked with pH paper and the range can be maintained by the addition of SECURE SEAL.

DISPOSAL:

SECURE SEAL does not contain any chromates. Dispose of SECURE SEAL solutions in the same manner as phosphate solutions.

PACKAGING:

6 gallon pails (22.7 liters) - 63 lbs. net (28.6 kg.)

CAUTION:

KEEP OUT OF THE REACH OF CHILDREN.
ACIDIC: Irritant and toxic if misused. Avoid skin and eye contact. Flush immediately with water in either case for at least 15 minutes and get medical attention. Do not swallow.

S-2745-982

DGS/kap

DuBOIS CHEMICALS, DIVISION OF CHEMED CORPORATION
GENERAL OFFICES: DuBOIS TOWER • CINCINNATI, OHIO 45202 • PHONE: (513) 762-6000

The information contained in this bulletin is, to our best knowledge, true and accurate, but all recommendations or suggestions are made without guarantee, since the conditions of use are beyond our control. DuBois Chemicals disclaims any liability incurred in connection with the use of these data or suggestions.

Material Safety Data Sheet

SECTION I
MATERIAL

SECURE SEAL

SECTION II
HAZARDOUS INGREDIENTS

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES:

	%	TLV (Units)
Phosphoric acid	12	1 mg/M^3

SECTION III
PHYSICAL DATA

BOILING POINT (°F.):	215°F.
SPECIFIC GRAVITY (H_2O = 1):	1.266
VAPOR PRESSURE (mm Hg.): at 20°C	17.5
PERCENT, VOLATILE BY VOLUME (%):	40
VAPOR DENSITY (AIR = 1):	N/A
EVAPORATION RATE (n-butyl acetate = 1):	>1
SOLUBILITY IN WATER:	100%

APPEARANCE AND ODOR: Light amber liquid; mild odor.

SECTION IV
FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): None

FLAMMABLE LIMITS: Lel— None Uel— None

EXTINGUISHING MEDIA: CO_2, foam

SPECIAL FIRE FIGHTING PROCEDURES: Overall protection of personnel if vapors are encountered.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Liquid produces hydrogen in contact with metals.

SECTION V
HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: See Section II

EFFECTS OF OVEREXPOSURE: None

EMERGENCY AND FIRST AID PROCEDURES: Flush skin with water, flush eyes thoroughly with water for at least 15 minutes and get medical attention.

SECTION VI
REACTIVITY DATA

STABILITY: Unstable Stable XX

CONDITIONS TO AVOID: None known

INCOMPATABILITY (Materials to avoid): Concentrated alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS: CO with incomplete combustion.

HAZARDOUS POLYMERIZATION: May Occur Will Not Occur XX

CONDITIONS TO AVOID: None known

SECTION VII
SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Flush small amounts to drain; collect and return large amounts to container.

WASTE DISPOSAL METHOD:

Separations of insolubles; contains phosphates.

SECTION VIII
SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type): None

VENTILATION:

LOCAL EXHAUST Yes SPECIAL None

MECHANICAL (General) None OTHER None

PROTECTIVE GLOVES: Acid resistant

EYE PROTECTION: Face shield when handling product

OTHER PROTECTIVE EQUIPMENT: None

SECTION IX
SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container closed when not in use. If frozen, thaw and mix to make usable.

OTHER PRECAUTIONS:

Voluntary; cautions on container label

DOT CORROSIVE

DuBOIS CHEMICALS, DIVISION OF CHEMED CORPORATION

Emergency Telephone No. (513) 769-4200

Prepared by: W. J. Corbett Date: August 5, 1982

W. J. Corbett

MATERIAL SAFETY DATA SHEET

NPCA 1-7

FOR COATINGS, RESINS AND RELATED MATERIALS

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

DATE OF PREP. July 25, 1983

Section I

MANUFACTURER'S NAME Chemical Specialties, Inc.

STREET ADDRESS 6450 Hanna Lake, S.E. CITY, STATE, AND ZIP CODE Caledonia, MI 49316

EMERGENCY TELEPHONE NO. 616-698-8102 Saturdays, Sundays & After 5:00 P.M.

INFORMATION TELEPHONE NO. 616-698-8102 616-868-6788

PRODUCT CLASS Water Reducible Alkyd

MANUFACTURERS CODE IDENTIFICATION 32-7019

TRADE NAME Red Oxide Primer

Section II — HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT by volume	TLV PPM	TLV mg/M³	LEL	VAPOR PRESSURE
Ethylene Glycol N-Butyl Ether	15	25		1.1	0.6 mmHg
Secondary Butyl Alcohol	10	150		1.7	12.7

Section III — PHYSICAL DATA

BOILING RANGE 192 - 446 °F

VAPOR DENSITY [X] HEAVIER, [ ] LIGHTER, THAN AIR

EVAPORATION RATE [ ] FASTER [X] SLOWER, THAN ETHER

PERCENT VOLATILE BY VOLUME 69.8

WEIGHT PER GALLON 10.6 pounds

Section IV — FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION Non-Flammable

FLASH POINT Not Applicable

LEL See Section II above

EXTINGUISHING MEDIA

Not Applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

SPECIAL FIRE FIGHTING PROCEDURES

None

Section V — HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE See Section II - Hazardous Ingredients

EFFECTS OF OVEREXPOSURE

ACUTE Dizzyness, Weakness, Irritation of Eyes

CHRONIC

EMERGENCY AND FIRST AID PROCEDURES

Remove to fresh air, wipe skin with dry cloth and wash with soap and water. Flush eyes with clear water and see physician if necessary.

Section VI — REACTIVITY DATA

STABILITY [ ] UNSTABLE [X] STABLE CONDITIONS TO AVOID

INCOMPATABILITY (*Materials to avoid*)

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition may yield carbon dioxide and/or carbon monoxide.

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

Provide adequate ventillation. Soak up with saw dust.

WASTE DISPOSAL METHOD

Incineration in accordance with local, state and federal regulations.

Section VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

VENTILATION

Local exhaust - sufficient in volume and pattern to keep air contamient concentration below current applicable O.S.H.A. Safety & Health requirements.

PROTECTIVE GLOVES Rubber or Plastic

EYE PROTECTION Protective glasses with side guards

OTHER PROTECTIVE EQUIPMENT Uniforms for working.

Section IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

DOL STORAGE CATEGORY

OTHER PRECAUTIONS

Do not take internally. Avoid prolonged breathing of vapors.

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER → • MID006411029 REACKNOWLEDGEMENT

FLEET ENGINEERS INC
1800 KEATING AVE
MUSKEGON MI 49442

INSTALLATION ADDRESS → 1800 KEATING AVE
MUSKEGON MI 49442

EPA Form 8700-12B (4-80) 09/28/81

INSPECTION AND ENFORCEMENT REVIEW/STATUS

ID # MID 006 411 029

FACILITY NAME Fleet Engineers

LOCATION Muskegon

COMPLIANCE STATUS: IN OUT

VIOLATION CLASS: I II III

G T TSD

REVIEWER:

DATE:

INSPECTION REVIEW

ACTION ITEM	STRT DATE	END DATE	RPT COMP	STAT CODE	RESP AGCY	RESP PERS	COMM	FREE FLDS	TYPE INSP	PART AGCY	LINK
1	830617	830617		O	S				N		

ENFORCEMENT ACTIONS

ACTION ITEM	DATE ISUD	DATE DUE	DATE RECD	STAT CODE	STAT DATE	RESP AGCY	RESP PERS	COMM	FREE FLDS	PLTY ASSD	PLTY CLTD	DTHR COM	DTHR COMP	LINK