KNAPHEIDE®

The Knapheide Mfg. Co. ▪ 436 South Sixth Street ▪ Box C 140 ▪ Quincy, Illinois 62306-2140
TEL: (217) 222-7131 ▪ FAX: (217) 222-5939 OR (800) 654-8997

September 19, 1995

REC'D
DEC 30 1998
RESP

MR. RUBEN MCCULLERS
ENVIRONMENTAL SCIENTIST
U.S. EPA, REGION VII
WSTM/RCRA/RCOM
726 MINNESOTA AVENUE
KANSAS CITY KS 66101

Dear Ruben:

Re: Supporting information for the four supplemental environmental projects for The Knapheide Mfg. Co.

We have reviewed your July 12, 1995, letter requesting additional information and documents to support the SEP's submitted May 5, 1995. Enclosed are answers to your questions and the invoices, expense reports, paint data and other information you requested.

If you have any questions or wish to discuss this information, please give me a call.

Sincerely,

THE KNAPHEIDE MFG. CO.

Gerry Korb

Gerry Korb
Vice President Operations

GWK:dd

Enclosure

cc: Bryce Butler, Knapheide (no attachments)
Bob Schreiber, Schreiber, Grana & Yonley (no attachments)
Sandy Oberkfell, Esq., Rudnick & Wolfe (no attachments)

R00117102
RCRA RECORDS CENTER

KNAPHEIDE®

SINCE 1848

SEP #1 EXAMINE ENVIRONMENTAL IMPACT OF FLOOD & DISPOSE OF ABOVE GROUND TANKS & WOOD TREATMENT FACILITY

a) CLEANUP OF THE BUILDINGS AND GROUNDS AND DAMAGE ASSESSMENT

The costs associated with the cleanup of West Quincy and repair of the buildings were reviewed and revised to include the cleanup costs only. The repair work can be considered a GMP.

The cleanup following the flood was necessary to assess the environmental effects of the flood. Mud and debris covered everything. All above ground tanks were dislodged from their stands and barrels and cans had migrated onto the site. Existing ground water monitoring wells were covered by 1-1½ feet of mud.

Schreiber, Grana & Yonley, Inc. had performed an investigation to assess if the 1993 flood had affected groundwater quality. The activities conducted for this purpose included locating and redeveloping the groundwater monitoring wells; collecting groundwater samples and analyzing them and assessing any damages to the groundwater monitoring wells, and assessing if there are any releases from the above ground tanks. A written report on this assessment was prepared by Schreiber, Grana & Yonley and submitted to MDNR in January 1995. This investigation was voluntarily conducted by Knapheide after discussions with MDNR that the cost of this post-flood investigation may be considered as a SEP by EPA. The fact that this post-flood investigation conducted by Knapheide was voluntary and not required by MDNR is further supported by MDNR's contract with BDAT Environmental Company to perform post-flood assessment at several sites in Missouri including Knapheide facility in West Quincy, Missouri. The post-flood assessment by Schreiber, Grana & Yonley had concluded that the groundwater quality had changed at the site.

The cost of this portion of the S.E.P. revised to include cleanup but no repair of West Quincy is:

Cleanup mud & debris (Attachment A)	$79,667.11
Assessment by SGY 2/28/95 (Attachment B)	1,230.00
Retesting of the wells (Attachment C)	6,258.00
Total	$87,155.11

Costs for Knapheide employees time are not included.

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SINCE 1848

#1 (cont.)

b) DISPOSAL OF THE TANKS, TANK CONTENTS, AND CLEAN AND CLOSE PIPING

1. Disposal of the heating oil, tanks and piping.

The heating oil was picked up by Coleman Chemical, Inc. 3/15/94 and taken to Kiesal Marine for disposal. The fuel lines to the furnaces were drained and disconnected by Koenker Plumbing & Heating. Shortridge Construction lifted a fuel tank off a guy wire so it could be dismantled.

We currently have quotations for final cleaning, sectioning and disposal of the tanks.

2. Disposal of the solvents, solvent tanks and paint process.

The thinner waste was picked up by Coleman Chemical 3/15/94 and taken to Clayton Chemical for disposal.

The cost of this portion of the SEP is:

SEP 1 b COST SUMMARY

3/15/94	Disposal of Heating Oil - Coleman (Attachment D)	$5,257.50
	Drain fuel lines to furnaces & disconnect - Koenker (Attachment E)	1,540.21
3/16/94	Move tank from guy wire-Shortridge (Attachment F)	465.00
3/15/94	Disposal of solvent - Coleman (Attachment G)	1,625.00
	Above ground tank closure estimate (Attachment H)	16,760.00
	Total	$25,647.71

Knapheide internal costs are not included.

c. DISMANTLING AND DISPOSING OF THE DAMAGED WOOD TREATMENT BUILDING

The wood treatment building was damaged beyond repair when flood waters floated the partially filled storage tank, containing wood treatment chemical, off the frame and through the roof. In order to dispose of the contents of this tank and the tank itself, Knapheide will have to demolish the building first because currently it poses a safety threat to anyone working near this tank. To leave the contents of this tank would create a threat to the environment because of potential spill. Demolition and disposal of the wood treatment building is the only feasible option for Knapheide in order to dispose of the storage tank and its contents. The storage tank contains a wood treatment solution which contains pentachlorophenol.

Cost estimate per proposal (Attachment I) - $35,665

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SEP #2 FIGHTING THE GREAT FLOOD OF 1993

It is very difficult to separate the flood fighting activities into good management practices and pollution prevention. However, without Knapheide's quick response and intense efforts, water would have entered the levee district the first day of the 16 day effort. Had the levee been topped July 1, none of the (5) active gasoline stations would have been able to remove their fuel and oils. Farmers would not have had time to remove their tanks of oil, grease, fuel, pesticides and herbicides. The Knapheide Company would have been forced to leave their fuel oil, paint, solvent, oil, grease, and wood treatment as they were to float down the Mississippi River.

The first materials removed from the Knapheide property were the chemicals and paints, followed by lumber, products and equipment. In the end, the property in the levee district was damaged or destroyed, but the vast majority of the hazardous materials were safely stored away from the flood waters.

Attachment J is a copy of a memorandum describing the use of SEP's. Please see Section E, paragraph 2, on page 9, which states; "The only exception to the prohibition against acceptance of a supplemental project which represents a "sound business practice" is for a pollution prevention project."

Knapheide's cost of the project after FEMA reimbursement was $255,495 as stated in my May 5, 1995, correspondence. A breakdown of the flood fighting costs is included as Attachment K. A more detailed breakdown is available if needed.

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SINCE 1848

SEP #3 PAINT USAGE & VOC REDUCTION IN TEMPORARY PLANT

a) Enclosed are copies of the revised Air Operating Permit for the temporary plant (Attachment L) and the IEPA Emission Standards for miscellaneous metal parts manufacturing plants (Attachment M) referencing the Illinois VOC regulatory limit of 3.5 lbs/gal. The Permit allowed us to use paints with up to 6.6 lbs/gal of VOM content as applied.

The estimates for total VOM emissions stated on the original Air Permit were based on lower production volumes and higher efficiency transfer rates than what were achievable at the temporary location. The revised permit reflects the actual experience.

Subsequent to start-up of the temporary facility, Knapheide implemented high solids prime and high solids top coat paints where applicable to reduce VOM emissions. The Construction Permit (Attachment N) and Revision to Operating Permit (Attachment O) document the changes and the revised allowable emission levels.

b) MSDS sheets for the original (Attachment P) and current (Attachment Q) paints and solvents used at the temporary facility are included. Attachment R is a table comparing the previous and current paints and a second table showing how the paints and solvents are combined to arrive at the respective VOC per sprayable gallon calculations.

c) The air permit for the new facility is not complete. However, the requirements are to be at or below 3.5 lbs/gal. (See IEPA Title 35: Environmental Protection Rules & Regulations (Attachment M). The processes at the new facility will be substantially different from those at the temporary facility. The VOC levels at the new location are expected to be substantially below the 3.5 lbs/gal requirement for prime paint. The top coat paints may remain close to the 3.5 lbs/gal level.

Knapheide made the improvements at the temporary plant to reduce VOC levels substantially below the permit levels. Most of these processes will be different in the new facility as all prime painting will be done using electrocoat equipment.

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SEP #3 PAINT USAGE & VOC REDUCTION IN TEMPORARY PLANT (cont.)

d) The ovens are required to cure the high solids paint in a reasonable length of time. Without the ovens, we would be forced to stay with low solids/high VOC paints which flash off and cure very rapidly. The high VOC paints are under 6.6 lbs/gal VOC content and meet the IEPA temporary operating permit guidelines.

Included as Attachment S are copies of the invoices for the ovens and other installation costs.

KNAPHEIDE®

SINCE 1848

SEP #4 PAINT TECHNOLOGY INVESTIGATION/CONSULTING

a) OK

b) The line item cost should read: 18 attendees at $40,000 annual salary and fringe benefits ÷ 250 days per year times 2 days = $5,760.

c) The travel costs billed at $738/hour regardless of the number of employees travelling reflects the fully burdened cost of the company aircraft per hour. The cost per hour does not change with the number of people aboard. At times, commercial rates may be less, but the number of hours employees must commit to the trip is much greater, offsetting the savings.

d) Included as Attachment T are copies of invoices and expense sheets for the previously listed costs and an update of the summary of expenses.

The cost of the Knapheide employee time is only included in the training seminar. Elsewhere, we have only included the costs of travel, meals, motels, etc. Attachment U is an update of the investigation costs. Please use it as a replacement for the original summary.

TENK BROS CONSTRUCTION INC.
520 Spring St.
QUINCY, ILLINOIS 62301

(217) 222-3361 or 224-9492

STATEMENT

DATE 12-3-93
NUMBER 1

08/93

L

.764.97

11792

Knapheide Mfg. Co.
6th. and State St.
Quincy, Il. 62301

EA

000000

TERMS:

PLEASE DETACH AND RETURN WITH YOUR REMITTANCE $

DATE	CHARGES AND CREDITS	BALANCE
	P.O.# 113595 BALANCE FORWARD	
	For work at West Quincy, 11-1-93 thru 11-26-93. See material and labor record attached.	$29,764.97
	2-1	
	9313	
	850980500	
	GC 12-93	
	ENTERED DEC 14 1993	

TENK BROS. CONSTRUCTION INC.

Thank You PAY LAST AMOUNT IN THIS COLUMN

PRODUCT 96-2 NEBS Inc., Groton, Mass. 01471 To Order PHONE TOLL FREE 1-800-225-6380

...BOR RECORD

...heide Mfg Co	DATE 12-1-93
LOCATION West Qey PO 113595	

QTY.	DESCRIPTION OF MATERIAL	PRICE	AMOUNT
	Scottie Potties		65 00
	Tire repairs		436 47
	Generator		150 00
	Backhoe, dump Truck		
	Ford Tractor		2100 00

LABOR RECORD	HOURS	RATE	AMOUNT
MECHANICS Labor			27,013 50
HELPERS			
SIGNED		TOTAL	2764.97

PRODUCT 230 (Nevins) Inc Groton, Mass 01471. To Order PHONE FOLL FREE 1 + 800 225 6380

...d LABOR

...S CONSTRUCTION INC.
520 Spring St.
QUINCY, ILLINOIS 62301

(217) 222-3361 or 224-9492

STATEMENT

DATE 11-1-93

NUMBER

11792

Knapheide Mfg. Co.
6th, and State ST.
Quincy, Il. 62301

9313

TERMS:

PLEASE DETACH AND RETURN WITH YOUR REMITTANCE

$

DATE	CHARGES AND CREDITS	BALANCE
	P.O.# 113595 BALANCE FORWARD	
	For work at West Quincy.	
	See material and labor record	
	attached. 9313	$31,160.74
	850980500	
	ENTERED NOV 22 1993	
	OK	
11.93		

TENK BROS. CONSTRUCTION INC.

Thank You

PAY LAST AMOUNT IN THIS COLUMN

PRODUCT 96-2 NEBS Inc., Groton, Mass. 01471. To Order PHONE TOLL FREE 1-800-225-6380

...nd LABOR RECORD

	DATE
...ide Mfg. Co	11-1-93
...st Quincy PO# 113595	

DESCRIPTION OF MATERIAL	PRICE	AMOUNT
Butler Panels		940 36
Tractor		40 00
Locks + chain		33 73
scottie Potties		65 00
service call + Tire (Ron's)		314 25
Blades		26 48
chain for gates		12 42
Generator		300 00
Bobcat Loader		1800 00
Backhoe, Dump Truck + Tractor		2000 00
		5532 24

LABOR RECORD	HOURS	RATE	AMOUNT
MECHANICS Mechanics			25628.50
HELPERS			
...ED		TOTAL	31,160.74

ECEIPT 11/19/93

DATE 11/19/93

CONSTRUCTION ST. IL

1.160.7400 EXT. 31.160.74

UNIT OF MEASURE ____

.00 UNIT OF MEASURE EA

U. 850 ACCT. 98050000000

NEW PANELS

- 940.36 = $1,000 (INSTALL THE PANELS)

[redacted]

DUCI 230 (Nuns) Inc. Groton, Mass 01471 To Order PHONE TOLL FREE 1 + 800 225 6380

CONSTRUCTION INC.
520 Spring St.
QUINCY, ILLINOIS 62301

(217) 222-3361 or 224-9492

STATEMENT

DATE 3-1-94 A
NUMBER 120

15/94

1,334.00

11792

Knapheide Mfg. Co.
P.O.Box C-140
Quincy, Il. 62306-2140

RE EA

ENTERED MAR 2 1 1994

50000000

TERMS:

PLEASE DETACH AND RETURN WITH YOUR REMITTANCE

$

DATE	CHARGES AND CREDITS	BALANCE
	P.O.#113595 line 5 BALANCE FORWARD	$1,334.00
	Work at West Quincy	
	5=1	
	9313	
	851950460	
	3.94	

TENK BROS. CONSTRUCTION INC.

Thank You

PAY LAST AMOUNT IN THIS COLUMN

PRODUCT 96-2 NEBS Inc., Groton, Mass. 01471 To Order PHONE TOLL FREE 1-800-225-6380

NEBS Inc., Groton, Mass. 01471 To Order PHONE TOLL FREE 1-800-225-6380

[illegible] 34-94

West Quincy PO# 113595

QTY.	DESCRIPTION OF MATERIAL	PRICE	AMOUNT
	Scotties Potties		65 00

LABOR RECORD	HOURS	RATE	AMOUNT
MECHANICS Labor			1269 00
HELPERS			
SIGNED		TOTAL	1334 00

PRODUCT 230 (Nevins) Inc. Groton Mass 01471 To Order PHONE TOLL FREE 1 + 800 225 6380

TENK BROS CONSTRUCTION INC.
520 Spring St.
QUINCY, ILLINOIS 62301

(217) 222-3361 or 224-9492

STATEMENT

DATE 2-1-94
NUMBER

16/94
L
2.34

11792

Knapheide Mfg. Co.
6th. and State ST.
Quincy, Il. 62301

RE
50

TERMS:

ENTERED FEB 2 1 1994

PLEASE DETACH AND RETURN WITH YOUR REMITTANCE.

$

DATE	CHARGES AND CREDITS	BALANCE
	P.O.# 113595 BALANCE FORWARD	
	Work at West Quincy.	$2,344.50
	(4)-1	
	9313	
	851950460	
	2.94	

TENK BROS. CONSTRUCTION INC.

Thank You PAY LAST AMOUNT IN THIS COLUMN

PRODUCT 96-2 Inc., Groton, Mass. 01471. To Order PHONE TOLL FREE 1-800-225-6380

Knapheide Mfg Co. 2-1-94

JOB LOCATION

West Quincy PO# 113595

QTY.	DESCRIPTION OF MATERIAL	PRICE	AMOUNT
	scotties Potties		65 00

LABOR RECORD	HOURS	RATE	AMOUNT
MECHANICS Labor			2279 50
HELPERS			
		TOTAL	2344 50

SIGNED

EIPT 2/16/94

PRODUCT 230 (NEBS) Inc. Groton Mass 01471 To Order PHONE TOLL FREE 1 + 800 225-6380

11792

TENK BROS CONSTRUCTION INC.
520 Spring St.
QUINCY, ILLINOIS 62301

(217) 222-3361 or 224-9492

STATEMENT

DATE 1-1-94

NUMBER

Knapheide Mfg. Co,
6th and State St.
Quincy, Il. 62301

TERMS:

PLEASE DETACH AND RETURN WITH YOUR REMITTANCE

$

DATE	CHARGES AND CREDITS	BALANCE
	P.P.# 113595 line 3 BALANCE FORWARD	
	For work at West Quincy,	
	11-26- thru 12-31-93	
	See material and labor record attached.	$39,518.51
	To move machines from 6th. st. to	
	West Quincy.	517.00
	3 = 1	
	Total	$40,035.51
Gary	#9313	
	~~[illegible]~~	
	851.950.460 - 16454.91	
1/94	100149000 - 10881.00	entered as
	100149000 - 12699.60	100.419.000
	ENTERED JAN 2 - 1994 Changed	1.27.94

TENK BROS. CONSTRUCTION INC.

Thank You PAY LAST AMOUNT IN THIS COLUMN

PRODUCT 96-2 NEBS Inc., Groton, Mass 01471. To Order PHONE TOLL FREE 1-800-225-6380

LABOR RECORD

	DATE
...eide Mfg. Co	1-1-94

...CATION
WQ. Move machines from 6th ST.

QTY.	DESCRIPTION OF MATERIAL	PRICE	AMOUNT
	To WQ		517 00
	PO# 113595		

LABOR RECORD	HOURS	RATE	AMOUNT
MECHANICS			
HELPERS			
SIGNED		TOTAL	517 00

PRODUCT 230 (Neils) Inc Groton, Mass 01471 To Order PHONE TOLL FREE 1 + 800 225 6380

... RECORD

... Mfg. Co	DATE 1-1-94
West Quincy PO# 113595	

QTY.	DESCRIPTION OF MATERIAL	PRICE	AMOUNT
	11-26-93 - Thru 12-31-93		
	Scotties Potties		65 00
	Tire Repairs		290 78
	Lube spray WD		
	Oiler Spout		4 98
	wire wheels		24 00
	Backhoe & Truck		900 00
	Koenker Plumb		
	(capped off line)		177 15
	Heimer Constr (pump house)	10	881 00
	Consolidated Contr. (Fence)	12	699 60
		25	042 51

23,757.75

LABOR RECORD	HOURS	RATE	AMOUNT
MECHANICS Labor		14	476 00
HELPERS			
SIGNED		TOTAL	

39,518.51 - $23,757.75 = [redacted]

PRODUCT 230 (Nevins) Inc. Groton Mass 01471 To Order PHONE TOLL FREE 1 + 800 225 6180

QUINCY, ILL., January 18 19 94

...side Manufacturing Company

P.O. Box C 140

Quincy, Illinois 62306 11223

IN ACCOUNT WITH

CHRISTNER COMPANIES, INC.

300 Broadway
Quincy, Illinois 62301

Phone 223-1455

1-1844

12-2-93	4 1/2 Hrs. Motor Grader @ $55.00/Hr.	$ 247.50
12-3-93	7 Hrs. Motor Grader @ $55.00/Hr.	385.00
	TOTAL	$ 632.50

Work @ West Quincy Location

P.O. #113600

B-1

9313
850 980 500

1.94

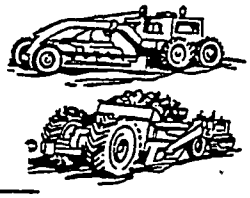
ENTERED FEB - 2 1994

QUINCY, ILL., February, 19 94

Knapheide Manufacturing Company

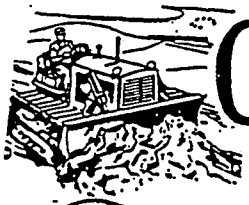
P.O. Box C 140

Quincy, Illinois 62306



IN ACCOUNT WITH

11223



CHRISTNER COMPANIES, INC.

300 Broadway
Quincy, Illinois 62301

Phone 223-1455

2-6-94	4	Hrs. Motor Grader @ $55.00/Hr.	$ 220.00
2-11-94	2	Hrs. Motor Grader @ $55.00/Hr.	110.00
2-14-94	8	Hrs. Dump Truck @ $35.00/Hr.	280.00
		TOTAL	$ 610.00

? date

P.O. #113606

Blading & Clean Up Mud at West Quincy Plant

ENTERED MAY 10 1994

9313

100149000

Pc
594

INVOICE NUMBER: 12164
CLIENT NUMBER: KNAP06
CLIENT NAME: KNAPHEIDE MFG. CO.

SCHREIBER GRANA & YONLEY INCORPORATED
ENVIRONMENTAL ENGINEERS
271 Wolfner Drive • Saint Louis, Missouri 63026
314/349-8399 • Fax 314/349-8384

2/10/94	Confernece call & discuss with RJS PALSETIA-SENIOR ENGINEER	1.00	85.00
2/11/94	Disc. with Harold, review of regs and analysis, hydrogeology report regarding mud and water PALSETIA-SENIOR ENGINEER	2.50	212.50
2/23/94	Knapheide meeting ABELN-ENG. MANAGER	6.00	510.00
2/23/94	Knapheide meeting SCHREIBER-PRINCIPAL ENG.	6.00	720.00
2/25/94	Review Illinois HW reports for two sites and comments to Harold PALSETIA-SENIOR ENGINEER	2.50	212.50
2/21/94	Coordinate meeting arrangements CLERICAL STAFF	0.25	7.50
2/22/94	Coordinate meeting arrangements CLERICAL STAFF	0.25	7.50
	SERVICE TOTAL	1,755.00	
2/15/94	SWBT Conference call charges CLERICAL STAFF		42.98
	EXPENSE TOTAL	42.98	

INVOICE NUMBER: 12652
CLIENT NUMBER: KNP08
CLIENT NAME: KNAPHEIDE MFG. CO.

LIBER
BRANA
YONLEY
INCORPORATED
ENVIRONMENTAL ENGINEERS

271 Wolfner Drive • Saint Louis, Missouri 63026
314/349-8399 • Fax 314/349-8384

5/24/94	Sampling/redevelopment project coordination RINEY - STAFF ENGINEER	1.00	80.00
5/24/94	Monitoring well redevelopment SHEPARD-ASSOC. ENGINEER	0.50	35.00
5/25/94	Monitoring well redevelopment SHEPARD-ASSOC. ENGINEER	15.00	1,050.00
5/26/94	Monitoring well redevelopment SHEPARD-ASSOC. ENGINEER	1.50	105.00
5/27/94	Sampling/redevelopment project coordination RINEY - STAFF ENGINEER	0.50	40.00
5/27/94	Monitoring well redevelopment SHEPARD-ASSOC. ENGINEER	0.50	35.00
5/31/94	Check on well covers SHEPARD-ASSOC. ENGINEER	0.50	35.00
5/19/94	Cost estimate revisions CLERICAL STAFF	1.50	45.00
	SERVICE TOTAL		1,425.00
5/25/94	Roberts Enviromental Drilling invoice #2244 RINEY - STAFF ENGINEER		1,667.50
/94	Water Level Indicator Rental - 1 day SHEPARD-ASSOC. ENGINEER		15.00
5/26/94	CPI Photo Finish invoice #30409 CLERICAL STAFF		31.00
5/31/94	JS Express invoice #87964 CLERICAL STAFF		6.90
5/25/94	Rubber Gloves, Safety Fencing and Latex Glove SHEPARD-ASSOC. ENGINEER		82.25
5/26/94	Meal charge SHEPARD-ASSOC. ENGINEER		5.72
5/25/94	Truck Rental - 1 day SHEPARD-ASSOC. ENGINEER		100.00
	EXPENSE TOTAL		1,908.37

2,925
1,425
1,908.37
6,258.37

13686

AMERICAN TECHNICAL & ANALYTICAL SERVICES, INC.

INVOICE

875 Fee Fee Road ◆ Maryland Heights, MO 63043-3211
Office (314) 434-4570 ◆ FAX (314) 434-0080 ◆ EIN: 43-1536947

PO# 423571

BILL TO
Harold D. Huggins
Facilities & Environmental Engineer Mg
The Knapheide Mfg. Co.
436 South Sixth
Quincy, IL 62036-2140

DATE: 06/29/94
INVOICE NUMBER: S8735
REF: KNAP 08

ATAS#	REPORT	DATE	SAMPLE ID		P O NUMBER	TEST	DESCRIPTION	COST	TOTAL
9976.01	9976.01	06/23/94	MW-3	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.02	9976.02	06/23/94	MW-4	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.03	9976.03	06/23/94	MW-2	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.04	9976.04	06/23/94	MW-5	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.05	9976.05	06/23/94	MW-9	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.06	9976.06	06/23/94	MW-8	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.07	9976.07	06/23/94	MW-6	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.08	9976.08	06/23/94	MW-7	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.09	9976.09	06/23/94	MW-1A	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.10	9976.10	06/23/94	MW-3A	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00

Oil

ENTERED JUL 13 1994

TOTAL SAMPLES	

SUB TOTAL	
MISC. CHARGE	2925.00
AMOUNT DUE	

Page: 1

851.960710

OK HH
7-11-94
P.O. [illegible]

Terms: Net Due Upon Receipt.
Please Remit To: 1700 W. ALBANY • BROKEN ARROW, OK 74012-1421
Include reference to the above Invoice Number in remittance.
Past due balances are subject to a service charge of 1.5% per month on the unpaid balance.

AMERICAN TECHNICAL & ANALYTICAL SERVICES, INC.

INVOICE

875 Fee Fee Road ◆ Maryland Heights, MO 63043-3211
Office (314) 434-4570 ◆ FAX (314) 434-0080 ◆ EIN: 43-1536947

BILL TO

Harold D. Huggins
Facilities & Environmental Engineer
The Knapheide Mfg. Co.
436 South Sixth
Quincy, IL 62036-2140

DATE: 06/29/94

INVOICE NUMBER: S8735

REF: KNAP 08

ATAS#	REPORT	DATE	SAMPLE ID		P O NUMBER	TEST	DESCRIPTION	COST	TOTAL
9976.11	9976.11	06/23/94	MW-3AB	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.12	9976.12	06/23/94	MW-4A	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00
9976.13	9976.13	06/23/94	FIELD BLANK	W		IN210	PET. HYDROCARB.	40.00	
						MS300	VOA - PRIPOL	185.00	
									225.00

TOTAL SAMPLES	13	SUB TOTAL	2925.00
		MISC. CHARGE	
		AMOUNT DUE	$2925.00

Terms: Net Due Upon Receipt.
Please Remit To: 1700 W. ALBANY • BROKEN ARROW, OK 74012-1421
Include reference to the above Invoice Number in remittance.
Past due balances are subject to a service charge of 1.5% per month on the unpaid balance.

COLEMAN CHEMICAL INC.

75 Sanger Street P.O. Box 5098 Peoria, Illinois 61601

(309) 674-6144

INVOICE 98128

CUSTOMER NO. KNACO

15718

BILL TO:

The Knapheide Mfg. Company
P.O.Box C 140
Quincy, IL 62306-2140

SHIP TO:

Knapheide Mfg. Company
Highway 24 West
West Quincy, MO 63471

4-15-94

DATE	SHIP VIA	F.O.B.	TERMS
03/16/94	Our Truck	Peoria	Net 30 Days

PURCHASE ORDER NUMBER	ORDER DATE	SALESPERSON	OUR ORDER NUMBER
Verbal 940037	03/15/94	04	17539

QUANTITY REQUIRED	QUANTITY SHIPPED		Unt/Ms	ITEM NO.	DESCRIPTION	UNIT PRICE	AMOUNT
4925.00	4925.00	0.00	gals.	WASTE	Waste Pick-Up - OIL TANKS	0.900	4,432.50
1.00	1.00	0.00	ea.	WASTE	FREIGHT CHARGE	825.000	825.00

WASTE PICKED UP ON 3/15/94
TAKEN TO KIESEL MARINE/THE KIESEL COMPANY
FOR DISPOSAL

MANIFEST # 0048090395

D-1 630 960700

ENTERED MAR 24 1994

NonTaxable Subtotal	5,257.50
Taxable Subtotal	0.00
Tax	0.00
Total	5,257.50

INTEREST: Coleman Chemical Inc. shall charge, and Purchaser agrees to pay, interest on any [illegible] interest shall be charged at NINETEEN PERCENT (19%) per annum, compounded monthly, or the highest interest permitted by law for commercial accounts, whichever is [illegible] Failure to exercise rights under this provision, upon one or more occasions, shall not waive the right to exercise the same subsequently.

IMPORTANT: All products are sold without warranty of any kind and purchasers will, by their own tests, determine suitability of such products for their own use. Seller warrants that all goods covered by this invoice were produced in compliance with the requirements of the Fair Labor Standards Act of 1938, as amended. Seller shall retain title to returnable drums. Drums are to be paid for in full, as invoiced, and full refund will be made promptly, provided drums are returned to original point of shipment within one year from date of invoice. Return freight charges to be prepaid. The drums returned must be the same originally shipped, and show no evidence of abuse, or use for purposes other than the storage of original contents. No cash discount will be allowed on drums. Existing taxes, or any additional taxes, levied by any governmental authority, on products herein named shall be for account of buyer.
NO CLAIMS FOR LOSS, DAMAGE OR LEAKAGE ALLOWED AFTER DELIVERY IS MADE IN GOOD CONDITION TO WAREHOUSE OR RAILROAD DEPOT.

CUSTOMER COPY — WHITE REMITTANCE COPY — YELLOW OFFICE COPY — PINK PEORIA COPY — BLUE

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.

THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Hazardous Waste Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

HAZARDOUS WASTE MANIFEST

EMERGENCY RESPONSE
U S COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT OF NATURAL RESOURCES
314-634-2436

Print or type (Form designed for use on elite (12-pitch) typewriter.) 0044

Form Approved OMB No 2050-0039, Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. M O D 0 0 0 7 6 6 9 9 8 — Manifest Document No. 0395

2. Page ____ of ____

Information in the shaded areas is required by State law. 0044

3. Generator's Name and Mailing Address
Knapheide
Highway 24
West Quincy, Missouri 65735

4. Generator's Phone (217) 222-7131

A. Missouri Manifest Document Number 0 0 4 8 0 9 [redacted] 0 3 9 5

B. G.S.I. (Gen. Site Address)

5. Transporter 1 Company Name: The Kiesel Company

6. US EPA ID Number: M O T 3 0 0 0 1 1 1 6 0

C. MO. Trans. ID: H-1202

D. Transporter's Phone: (314) 351-5500

7. Transporter 2 Company Name

8. US EPA ID Number

E. MO. Trans. ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Kiesel Marine/The Kiesel Company
Foot of Branch Street
St. Louis, Missouri 63147

10. US EPA ID Number: M O T 3 0 0 0 1 1 1 6 0

G. State Facility's ID: RR-124

H. Facility's Phone: (314) 421-0328

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Oil, Combustible Liquid NA 1270 ERG #27	0 0 1	T T	04925	G	EPA WASTE CODE; STATE D 0 9 8
b.					EPA WASTE CODE; STATE
c.					EPA WASTE CODE; STATE
					EPA WASTE CODE; STATE

J. Additional Descriptions for Materials Listed Above	K. Handling Code (Facility Use Only) Interim	Final	Comments
a. Specific Gravity - .9	a. S 0 2	T 5 0	
b.	b.		
c.	c.		
d.	d.		

15. Special Handling Instructions and Additional Information

In case of emergency contact (314) X 421-0328.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and applicable state regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method available to me that I can afford.

GENERATOR — Printed/Typed Name: RONALD I RATHBUN — Signature: Ronald I Rathbun — Month Day Year: 03 15 94

TRANSPORTER — 17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: Jeff Crispi — Signature: Jeff Crispi — Month Day Year: 03 15 94

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Month Day Year

FACILITY — 19. Discrepancy Indication Space

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. — Printed/Typed Name: Denise Flynn — Signature: Denise Flynn — Month Day Year: 03 15 94

MISSOURI DNR FINAL COPY — PART 1

THIS COPY MUST BE SENT BACK TO THE GENERATOR BY THE DESIGNATED FACILITY THEN TRANSMITTED TO THE DEPARTMENT BY THE GENERATOR.

EPA Form 8700-22 (Rev. 8-91) MDNR-HWG 10

VENDOR COL' AN CHEMICAL/OIL INC

CHECK DATE 4/15/94 CHECK NO. 0 2478

INVOICE DATE	INVOICE NO: / DESCRIPTION		INVOICE AMOUNT	DISCOUNT	AMOUNT
3/16/94	98128	WASTE PICK UP	5,257.50	.00	5,257.50
3/17/94	98150	WASTE PICK UP	1,625.00	.00	1,625.00
		TOTALS ▶	6,882.50	.00	6,882.50

KNAPHEIDE®

SINCE 1848

THE KNAPHEIDE MFG. CO.
6 SOUTH SIXTH STREET, P.O. BOX C140, QUINCY, ILLINOIS 62306 ■ 217-222-7131

MERCANTILE TRUST & SAVINGS BANK
QUINCY, ILLINOIS

70-53/812

KNAPHEIDE®

SINCE 1848

THE KNAPHEIDE MFG. CO.
436 SOUTH SIXTH STREET
P.O. BOX C140
QUINCY, ILLINOIS 62306
217-222-7131

CHECK NO. 052478 052478

DATE	AMOUNT
4/15/94	**6,882.50

VOID AFTER 90 DAYS

PAY SIX THOUSAND EIGHT HUNDRED EIGHTY-TWO DOLLARS AND 50 CENTS

VENDOR NO. 13718

THE KNAPHEIDE MFG. CO.

TO THE ORDER OF

COLEMAN CHEMICAL/OIL INC
P.O. BOX 2838
EAST PEORIA IL 61611

NOT NEGOTIABLE

10987

Knapheide Manufacturing Company
436 South 6th Street
P.O. Box C140
Quincy, Illinois 62306-2140

— INVOICE —

KOENKER PLUMBING & HEATING

PHONE 222-2964 ILLINOIS LICENSE # 058-081332
403 HAMPSHIRE ST. QUINCY, ILLINOIS 62301

RADIO DISPATCHED TRUCKS

DATE	JOB NAME	JOB LOCATION
8/29/94	Knapheide Mfg.	West Quincy

DATE	JOB DESCRIPTION	AMOUNT
8/11/94 - 8/19/94	P.O. # 113613 PARTICIAL BILLING	
	Drain residual fuel oil from overhead storage tanks and overhead supply lines. Pressurize each line and tank with air and blow out oil into drums.	
	1-1/2 x cl. BI nipple	.33
	2-3/8" comp. coupling	3.64
		3.97
	tax (MO)	.23
	labor	1151.63
		$1155.83

9 = 1

ENTERED SEP 26 1994

9313

100149000

VISA & MASTERCARD ACCEPTED

№ 231 INV. NO.

PAY LAST FIGURE IN AMOUNT COLUMN

TERMS: NET 30 DAYS, 1½% PER MONTH, 18% A YEAR DELINQUENT CHARGE.

10987

Knapheide Manufacturing Co.
436 South 6th Street
P.O. Box C140
Quincy, Illinois 62306-2140

— INVOICE —

KOENKER PLUMBING & HEATING

PHONE 222-2964 ILLINOIS LICENSE / 058-081332
403 HAMPSHIRE ST. QUINCY, ILLINOIS 62301

RADIO DISPATCHED TRUCKS

DATE	JOB NAME	JOB LOCATION
9/16/94	Knapheide Mfg. co.	West Quincy

DATE	JOB DESCRIPTION	AMOUNT
	P.O. # 113613 PARTICIAL BILLING	
8/30/94	Finished draining residual oil out of oil lines and holding tanks. Installed gas regulator on new heating and air condition furnace in Platform building.	
	10 = 1	
	ENTERED SEP 26 1994	
	1-1/2" gas regulator	31.71
	1-CP shower arm	6.86
	1-1/2 x 4 1/2" BI nipple	.57
	1-1/2 x 5" BI nipple	.59
		39.73
	tax (MO) 9313	2.27
	labor	342.38
	100149ow	$384.38
	9.94	

VISA & MASTERCARD ACCEPTED

№ 23[redacted]1 INV. NO.

PAY LAST FIGURE IN AMOUNT COLUMN

TERMS: NET 30 DAYS, 1½% PER MONTH
18% A YEAR DELINQUENT CHARGE.

R R

SHORTRIDGE CONSTRUCTION, INC.

3908 N. 24th St.
QUINCY, ILLINOIS 62301
Phone 222-6647

11672

CUSTOMER'S ORDER NO.	PHONE	DATE
113609		3/18/94

NAME: Knapheide

ADDRESS: ATTN: Harold Huggins

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RET'D.	PAID OUT
SR						

QTY.	DESCRIPTION	PRICE	AMOUNT
	3/16/94		
3	25T	90.	270 00
1	overtime for operator	15.	15 00
	lift tank from under high wires		
6 hr	labor	30	180 00
	(2)-1		
	OK HA 4-6-94		
	9313 851 9313		
	100149ow		
	ENTERED APR 18 1994		
	4.94	TAX	
RECEIVED BY		TOTAL	465 00

All claims and returned goods MUST be accompanied by this bill.

PRODUCT 610

4004

Thank You

COLEMAN CHEMICAL INC.

75 Sanger Street P.O. Box 5098 Peoria, Illinois 61601
(309) 674-6144

INVOICE 98150

CUSTOMER NO. KNACO

4-15-94

13718

BILL TO:

The Knapheide Mfg. Company
P.O.Box C 140
Quincy, IL 62306-2140

SHIP TO:

Knapheide Mfg. Company
Highway 24 West
West Quincy, MO 63471

DATE	SHIP VIA	F.O.B.	TERMS
03/17/94	~~Our Truck~~	Peoria	Net 30 Days

PURCHASE ORDER NUMBER	ORDER DATE	SALESPERSON	OUR ORDER NUMBER
Verbal 940037	03/17/94	04	17559

QUANTITY REQUIRED	QUANTITY SHIPPED		Unt/Ms	ITEM NO.	DESCRIPTION	UNIT PRICE	AMOUNT
1600.00	1600.00	0.00	gals.	WASTE	Waste Pick-Up -THINNER TANKS	0.900	1,440.00
1.00	1.00	0.00	ea.	WASTE	FREIGHT CHARGE	185.000	185.00

WASTE PICKED UP ON 3/15/94
TAKEN TO CLAYTON CHEMICAL FOR DISPOSAL

MANIFEST #6180184

D-1 630 940 200

ENTERED MAR 24 1994

NonTaxable Subtotal	1,625.00
Taxable Subtotal	0.00
Tax	0.00
Total	1,625.00

[illegible]EREST: Coleman Chemical Inc. shall charge, and Purchaser agrees to pay, interest on any and all [illegible] shall be charged at NINETEEN PERCENT (19%) per annum, com-[illegible]d monthly, or the highest interest permitted by law for commercial accounts, whichever is higher, from the date of invoice. Failure to exercise rights under this provision, upon one or more occasions, shall not waive the right to [illegible]e same subsequently.

[illegible]ll products are sold without warranty of any kind and purchasers will, by their own tests, determine suitability of such products for their own use. Seller warrants that all goods covered by this invoice were produced in [illegible]e requirements of the Fair Labor Standards Act of 1938, as amended. Seller shall retain title to returnable drums. Drums are to be paid for in full, as invoiced, and full refund will be made promptly, provided drums [illegible]l point of shipment within one year from date of invoice. Return freight charges to be prepaid. The drums returned must be the same originally shipped, and show no evidence of abuse, or use for purposes other [illegible]al contents. No cash discount will be allowed on drums. Existing taxes, or any additional taxes, levied by any governmental authority, on products herein named shall be for account of buyer.

[illegible]AGE OR LEAKAGE ALLOWED AFTER DELIVERY IS MADE IN GOOD CONDITION TO WAREHOUSE OR RAILROAD DEPOT.

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

94055/0043

State Form LPC 62 8/81 IL532-0810

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039. Expires 9-30-94

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MOD000766998

Manifest Document No. 10394

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address
Knapheide
Highway 24
West Quincy, Missouri 65735

Location If Different
Gen. Ph.# (217) 222-7131

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS: (314) 421-0328

A. Illinois Manifest Document Number IL 6180184 FEE PAID IF APPLICABLE

B. Illinois Generator's ID 0 0 1 0 6 5 0 0 2 3

C. Illinois Transporter's ID 0 9 7 9

D. (314) 351-5500 Transporter's Phone

E. Illinois Transporter's ID

F. ( ) Transporter's Phone

5. Transporter 1 Company Name: The Kiesel Company

6. US EPA ID Number: MOT300011160

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Clayton Chemical Company
#1 Mobile Avenue
Sauget, Illinois ~~62040~~ 62201

10. US EPA ID Number: ILD066918327

G. Illinois Facility's ID I 6 3 X 1 2 1 0 0 0 4

H. Facility's Phone (618) 271-0467

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. "RQ" Waste Flammable Liquid, N.O.S., (Xylene, Mineral Spirits) 3, UN 1993, PG II ERG #27	001	T.T	1600	G	EPA HW Number: XXD001 Authorization Number: 000125
b.					EPA HW Number: XX Authorization Number:
c.					EPA HW Number: XX Authorization Number:
d.					EPA HW Number: XX Authorization Number:

J. Additional Descriptions for Materials Listed Above: Specific Gravity - .75

K. Handling Codes for Wastes Listed Above in Item #14: G=Gallons Y=Cubic Yards Interim S02 Final T50

15. Special Handling Instructions and Additional Information
CC# 8491
MO Gen. ID# 004809
MO Trans. ID# H-1202
Truck License # IL-P55686
MO Facility ID# RRIL01

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: RONALD I RATHBUN — Signature: [signature] — Date (Month Day Year): 031594

TRANSPORTER — 17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: STEVEN J. BAUER — Signature: [signature] — Date (Month Day Year): 031594

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name: — Signature: — Date (Month Day Year):

FACILITY — 19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. — Printed/Typed Name: Craig Gooden — Signature: [signature] — Date (Month Day Year): 031594

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

cc: Bryce
7-31-95 D

SCHREIBER GRANA & YONLEY INCORPORATED
ENVIRONMENTAL ENGINEERS

271 Wolfner Drive • Saint Louis, Missouri 63026
314/349-8399 • Fax 314/349-8384

July 25, 1995

Mr. Gerry Korb
Vice President - Manufacturing
The Knapheide Mfg. Co.
P.O. Box C-140
436 South 6th Street
Quincy, IL 62306-2140

Re: Proposal No. 953550
Above Ground Storage Tank Closure Cost Estimate
West Quincy, Missouri

Dear Mr. Korb:

This letter presents a cost estimate for performing closure of six (6) above ground storage tanks (ASTs) located at The Knapheide Mfg. Co. (Knapheide) facility in West Quincy, Missouri. This scope of work and cost estimate is based on the April 4, 1995 request of Knapheide as well as subsequent conversations with Mr. Harold D. Huggins, formerly employed by Knapheide, on April 20 and 21, 1995, and July 11, 1995 written comments received from Ms. Sandra L. Oberkfell of Rudnick & Wolfe. It is designed to be both cost effective and responsive to applicable and/or related environmental regulations. Specifically, bids were obtained from local and regional contractors to close six (6) ASTs. According to information supplied by Knapheide, the ASTs consist of the following:

- One (1) 1,000-gallon AST, formerly containing xylene
- One (1) 1,000-gallon AST, formerly containing SC-100 (xylene blend)
- One (1) 4,000-gallon AST, formerly containing #2 fuel oil
- One (1) 9,700-gallon AST, formerly containing #2 fuel oil
- One (1) 9,700-gallon AST, formerly containing #2 fuel oil
- One (1) 12,000-gallon AST, formerly containing #2 fuel oil

Additionally, it is our understanding that the ASTs have each been emptied of all liquid contents.

Conversations with the Missouri Department of Natural Resources (MDNR) indicate that AST closure regulations do not currently exist; however, the MDNR recommends following the current underground storage tank (UST) closure regulations.

Based on our research, Schreiber, Grana & Yonley, Inc. presents the following recommendations for the closure of the above-mentioned ASTs:

1) The six (6) ASTs as listed above will be cleaned according to current industry standards. As previously noted, it is assumed that all liquids have been removed from the ASTs; however, sludge and scale (solid materials) may remain. The ASTs will be checked for the presence of explosive vapors and, if present, purged of such with an abductor and compressed air. The ends of each AST will be cut open and cleaned of any residual sludge/scale via hand shoveling and oil dry absorbent material. Supplied air will be used to ensure adequate air for the workers while cleaning inside the ASTs. All sludge/scale will be containerized in properly labeled, DOT-approved, 55-gallon, steel drums. The drums will be stored on-site in a secure location pending disposal. By virtue of the cleaning, the ASTs will be rendered non-hazardous, cut up and recycled at a scrap facility in Quincy, Illinois.

2) The piping formerly associated with the six (6) ASTs (where visible at the surface) will be cleaned of any residual sludge/scale through the application of a negative air pressure per piping run. This activity will remove any mobile materials from the lines. Each of the lines will then be capped at the ends. All generated material will be containerized with the AST residuals in 55-gallon drums. The drums will be stored on-site in a secure location pending their disposal.

3A) All containerized sludge, scale, etc. generated during the cleaning process of the #2 fuel oil ASTs and the SC-100 AST will be properly disposed. It is assumed that this material will be classified as a special waste. With this, it is anticipated that the material will be disposed of at the BFI sanitary landfill located to the north of West Quincy, Missouri. In order to obtain waste acceptance, a representative sample of the material will be collected and analyzed for ignitability, reactivity, benzene, pH, as well as a paint filter test. It is assumed that one (1) drum of material will be generated per AST, or five (5) drums total.

3B) The material generated from the xylene AST, assumed to total one (1) drum, cannot be classified as a special waste, and thus, cannot be accepted at a sanitary landfill. It must be classified/disposed of as a hazardous waste. A sample of the waste will be submitted to Rollins Environmental Inc./Aptus Inc. (Rollins/Aptus) for analysis in order to obtain the appropriate waste characterization/acceptance. Rollins/Aptus will be providing waste characterization/disposal services in association with the closure of the pentachlorophenol AST/dip tank at the site, disposing of the liquids and sludge at its Coffeyville, Kansas facility. The xylene sample analysis will include RCRA metals, reactivity, corrosivity, ignitability, water percentage, BTU, ash and total halogen. Upon the completion of the waste acceptance process, the material will be disposed of at the Rollins/Aptus facility in Coffeyville, Kansas. It is assumed that no sludge will be generated.

4) Upon the completion of the above tasks, Schreiber, Grana & Yonley, Inc. will prepare a short correspondence detailing the closure procedures which were implemented. This correspondence will be submitted to Knapheide for review, comments and/or approval.

Schreiber, Grana & Yonley, Inc. will provide environmental oversight of all on-site AST closure activities, such as documenting proper, industry standard procedures for AST cleaning, decommissioning, and disposal of all waste materials generated by cleaning and dismantling of the ASTs. All on-site personnel associated with this project will be trained according to OSHA 1910.120.

Site work associated with Tasks 1 and 2 will be conducted during one (1) site mobilization, while Task 3 will involve a second site visit.

R. Cooper Contracting Services, Inc. of St. Louis, Missouri, will be conducting the AST closure activities as well as the special waste hauling.

A cost estimate breakdown of the above work tasks is presented below in Table 1:

TABLE 1

ABOVE GROUND STORAGE TANKS CLOSURE COST ESTIMATE

Task	Labor	Expenses	Analytical	AST Disposal	Drum Disposal	Total
1) Clean, dismantle and dispose of ASTs; containerize sludge, solid materials, and AST cleaning materials	$3,000	$760	–	$8,000	–	$11,760
2) Clean and cap piping; containerize sludge, solid materials, and cleaning materials						
3A) Non-hazardous drum disposal	$400	–	$200	–	$1,050	$1,650
3B) Hazardous drum disposal*	–	–	$550	–	$750	$1,300
4) Correspondence development, project management	$2,050	–	–	–	–	$2,050
TOTAL:	$5,450	$760	$750	$8,000	$1,800	$16,760

Note: The costs listed for Task 3B are contingent upon such occurring during the same site mobilization as that associated with the pentachlorophenol liquid/sludge disposal from the closure of the AST/Dip tank at the site. The costs further assume that no sludge will be generated during the xylene AST closure.

Schreiber, Grana & Yonley, Inc. proposes to provide services necessary to complete all activities on a time-and-expense basis. The budget outlined in Table 1 will not be exceeded without prior approval from Knapheide. All subcontractor invoices will be forwarded to Knapheide for direct payment.

Upon your approval of this cost estimate, Schreiber, Grana & Yonley, Inc. will implement the AST closure process. Should you have questions or require further information, please contact the undersigned at (314) 349-8399. Schreiber, Grana & Yonley, Inc. appreciates the opportunity to provide our services to Knapheide.

Sincerely,

SCHREIBER, GRANA & YONLEY, INC.

Allen L. Steinkamp, C.P.G.
Staff Hydrogeologist

Douglas L. Abeln
Engineering Manager

ALS/DLA/cct

cc: Ms. Sandra L. Oberkfell - Rudnick & Wolfe

sgy\sgy22\knap3550.pro

cc: Bryce 7-31-95 D

SCHREIBER GRANA & YONLEY INCORPORATED
ENVIRONMENTAL ENGINEERS

271 Wolfner Drive • Saint Louis, Missouri 63026
314/349-8399 • Fax 314/349-8384

July 25, 1995

Ms. Sandra L. Oberkfell
Rudnick & Wolfe
203 North LaSalle Street
Chicago, IL 60601-1293

Re: Aboveground Xylene Storage Tank Waste Disposal
Rollins/Aptus Scope of Services

Dear Ms. Oberkfell:

This letter has been prepared according to your July 13, 1995 verbal request involving documentation of the services and unit costs associated with the transportation and disposal of sludge and scale (solid materials) expected to be generated during the closure of a 1,000-gallon above ground storage tank (AST) which formerly contained xylenes. The AST is located at The Knapheide Mfg. Co. (Knapheide) facility in West Quincy, Missouri.

A letter dated July 20, 1995 from Rollins Environmental, Inc./Aptus, Inc. (Rollins/Aptus) contained unit costs to conduct activities involving the disposal of liquid and sludge containing xylenes from the Knapheide facility. The applicable costs are as follows:

1) **Transportation:**

- Transportation of containerized xylene solid/sludge materials derived from the cleaning of the AST from West Quincy, Missouri to Coffeyville, Kansas: $500.00 minimum stop charge

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2) **Disposal:**

- Incineration of xylene solid materials at the Aptus-Coffeyville, Kansas facility: $150.00 per 55-gallon drum
- Incineration of xylene sludge materials at the Aptus-Coffeyville, Kansas facility: $12.00 per gallon; if sludge is greater than 60% of the drum, a $0.75 per pound ($300.00 minimum) charge will also apply
- RCRA Waste Treatment fee: $28.00 per ton

3) **Other Charges:**

- Waste analysis/profiling fee per waste stream: $550.00

The scope of services to be provided by Rollins/Aptus regarding the xylene AST sludge disposal are directly related to the scope of work described in the June 2, 1995 proposal sent to Mr. Harold D. Huggins, formerly of Knapheide. These tasks are as follows:

Sludge and scale will be removed from the xylene AST by a Schreiber, Grana & Yonley, Inc. subcontractor. The sludge/scale and tank cleaning materials will be containerized in 55-gallon drums.

The material generated from the xylene AST must be classified for disposal as a hazardous waste. Accordingly, a sample of the waste will be submitted to Rollins/Aptus for analysis in order to obtain the appropriate waste characterization/acceptance. The xylene sample analysis will include RCRA metals, reactivity, corrosivity, ignitability, water percentage, BTU, ash and total halogen.

Upon the completion of the waste acceptance process, a Schreiber, Grana & Yonley, Inc. subcontractor will load such into appropriate transportation vehicle(s) to be supplied by Rollins/Aptus. All sludge/scale/rinsate/etc. generated during the cleaning process will be transported by Rollins/Aptus as a hazardous waste and incinerated at the Rollins/Aptus facility in Coffeyville, Kansas.

Please review this correspondence at your earliest convenience and direct questions regarding any of the information presented herein to the undersigned at (314) 349-8399.

Sincerely,

SCHREIBER, GRANA & YONLEY, INC.

Allen L. Steinkamp

Allen L. Steinkamp, C.P.G.
Staff Hydrogeologist

Douglas L. Abeln
Engineering Manager

ALS/DLA/cct

cc: Mr. Gerry Korb - The Knapheide Mfg. Co.

knp07/aptusast.ltr

cc: Bryce
7-31-95
D

SCHREIBER & GRANA & YONLEY INCORPORATED
ENVIRONMENTAL ENGINEERS

271 Wolfner Drive ▪ Saint Louis, Missouri 63026
314/349-8399 ▪ Fax 314/349-8384

July 25, 1995

Mr. Gerry Korb
Vice President - Manufacturing
The Knapheide Mfg. Co.
P.O. Box C-140
436 South 6th Street
Quincy, IL 62306-2140

Re: Revised Proposal No. 953436B
Wood Preservative Treatment Building
West Quincy, Missouri

Dear Mr. Korb:

This letter presents a revised proposal for performing closure of the wood preservative treatment building located at The Knapheide Mfg. Co. (Knapheide) facility in West Quincy, Missouri. Consistent with discussions with Mr. Harold D. Huggins, formerly employed by Knapheide, on August 26, 1994, December 13, 1994, January 11, 1995, and April 4, 1995, as well as subsequent research, this closure plan is designed to be both cost effective and responsive to applicable environmental regulations. This revision to the previous proposals is based on the April 4, 1995 request of Knapheide and July 11, 1995 written comments received from Ms. Sandra L. Oberkfell of Rudnick & Wolfe.

Bids were obtained from local and regional contractors to remove a wood preservative treatment building, as well as a 10,000-gallon above ground storage tank (AST), a dip tank, and all associated piping and pumps.

According to the information supplied by Knapheide, the AST contains an estimated liquid/sludge mixture volume of [redacted]. This mixture is comprised of Woodtreat[R] wood preservative, a mineral spirit based wood preservative which contains no pentachlorophenol. According to process knowledge of the operations provided by Knapheide, Woodtreat[R] has been used exclusively since 1986. The AST was completely emptied of its liquid contents in November 1992. Prior to the flooding of 1993, Knapheide pumped the contents of the dip tank into the AST for safe storage during the flooding. Upon the receedance of the flood waters, Knapheide arranged for the sampling of the wood treatment liquid in the AST and analyzed it for pentachlorophenol. This sampling occurred on March 25, 1994. The analysis indicated [redacted] (ppm).

Because the AST has been emptied of its liquids at least once since the discontinuation of the usage of pentachlorophenol, and the fact that the contents of the dip tank were pumped into the AST, subsequently, the detected pentachlorophenol (112 ppm) is representative of a spent formulation. Therefore, the applicable EPA waste code for the contents of the AST is F032. Because of the presence of pentachlorophenol at or above 100 ppm, an additional waste code of D037 would also apply. Additionally, waste code D001 would also apply if the flash point of the solution is less than 140°F.

40 CFR 261.35 provides the procedure for the cleaning of the tanks after all contents are removed. It also mentions that if the equipment is not cleaned per this procedure, the disposal will have to be managed as F032 hazardous waste. However, if the AST and dip tank are cut up and recycled as scrap metal, the exemption provided under 40 CFR 261.6(a)(3)(iii) applies. This exemption states that certain recyclable materials (e.g., scrap metal) are not subject to regulation under parts 262 through 266, or parts 268, 270 or 124.

Based on our research, Schreiber, Grana & Yonley, Inc. presents the following recommendations for the closure of the wood preservative building:

1. The liquid contents of the AST were sampled in order to obtain the appropriate waste characterization/acceptance at the Rollins Environmental Inc./Aptus Inc. (Rollins/Aptus) facility in Coffeyville, Kansas. This sample analysis will include RCRA metals, reactivity, corrosivity, ignitability, water percentage, BTU, ash and total halogen.

   During the April 4, 1995 meeting, the scope of work contained in Proposal #95-3436 dated January 18, 1995 (less the proposal revisions contained herein) was approved. Subsequently, an AST liquid sample was obtained on April 10, 1995. The sample has not yet been submitted for analysis due to the lack of a Knapheide executed Rollins/Aptus contract.

   The costs associated with Task 1 as contained in the January 18, 1995 proposal remain as a part of this revised proposal for consistency.

2. The roof and walls of the building will be dismantled. The recyclable material, such as scrap, will be disposed of at a recycling facility in Quincy, Illinois. The non-recyclable material will be disposed of as a demolition waste at the BFI Backridge sanitary landfill located to the north of West Quincy, Missouri. Disposal receipts will be obtained for all material removed from the site. As directed on April 21, 1995 by Mr. Harold D. Huggins, the concrete floor is to remain in place. This work will be performed by Christner Company (Christner) of Quincy, Illinois.

3. Upon receipt of pentachlorophenol waste stream approval from Rollins/Aptus, the liquid contents of the AST and dip tank (if any) will be pumped into an appropriate transportation vehicle(s) to be supplied by Rollins/Aptus. It is assumed that the total volume of the waste liquid will be 2,500 gallons. The liquid will be disposed of as F032/D037/D001 hazardous

waste at the Rollins/Aptus facility in Coffeyville, Kansas. It is assumed that no demurrage fees will be accrued.

4. Sludge and scale will be removed by scraping and/or washing with diesel fuel. The AST, dip tank and associated equipment (such as pumps and piping) will be rinsed with diesel until no visible residues are observed. The sludge and associated material will be containerized in 55-gallon drums. It is assumed that the total volume of the sludge/rinsate will be 600 gallons, with each drum weighing approximately 600 pounds. This work will be performed by R. Cooper Contracting Services, Inc. (Cooper) of St. Louis, Missouri.

5. The cleaned AST, dip tank, and piping and pumps will be sent to a metal recycling facility as scrap metal. This shipment will be handled as non-hazardous waste based on the exemption provided for in 40 CFR 261.6(a)(3)(iii). This work will be performed by Cooper.

6. After removing the dip tank, a soil sample will be collected from beneath the dip tank. The soil sample will be submitted to Specialized Assays, Inc. (Specialized Assays) analytical laboratory in Nashville, Tennessee for total pentachlorophenol analysis according to SW-846 Method 8270. If the sample indicates contamination of pentachlorophenol above the proposed USEPA action level of 2000 ppm, then soil remediation may be required. Otherwise, no further action would be necessary. For the purposes of this proposal, it is assumed that subsurface remediation activities will not be conducted.

7. All sludge and rinsate generated during the cleaning process will be disposed of as F032/D037/D001 hazardous waste at the Rollins/Aptus facility in Coffeyville, Kansas. It is assumed that no demurrage fees will accrue.

8. Upon the completion of the above tasks and receipt of all analytical data, Schreiber, Grana & Yonley, Inc. will prepare a short correspondence detailing the procedures and methodologies which were implemented. This correspondence will be submitted to Knapheide and counsel for review. The costs associated with this report assume that the soil will not require any remediation. If remediation becomes necessary, the concrete floor may need to be removed at a later date.

Task 1 encompassed a one-day site mobilization. Task 2 is estimated to encompass a three-day site mobilization. Task 3 is estimated to encompass a one-day site mobilization, while Tasks 4, 5, and 6 are estimated to encompass a two-day site mobilization. All scrap metal and building debris will be hauled to the appropriate receiving facilities during the Task 2 mobilization. Task 7 will involve an additional one-day site mobilization in order to provide oversight and waste manifesting of the transportation of the containerized sludge/rinsate to the Rollins/Aptus facility for subsequent treatment.

A cost estimate breakdown of the above work tasks is presented below in Table 1:

TABLE 1

WOOD PRESERVATIVE TREATMENT BUILDING CLOSURE COST ESTIMATE

Task	Labor	Expenses	Analytical	Demolition and Tank Contractors	Liquid/ Sludge Disposal	Total
1) Sample liquid in AST	$320	$150	$550	–	–	$1,020
2) Dismantle & dispose roof and walls	—	—	–	$6,000	–	$6,000
3) Dispose of liquid contents in AST/dip tank	$750	$150	–	–	$7,700	$8,600
4) Clean and dismantle AST, dip tank, pumps and piping, containerize sludge and rinsate	$2,000	$500	–	$4,000	–	$6,770
5) Dispose of AST, dip tank, pumps, piping			–		–	
6) Sample soil beneath dip tank			$270		–	
7) Dispose of containerized sludge/rinsate	$625	$150	–	–	$8,300	$9,075
8) Correspondence development, project management	$4,200	–	–	–	–	$4,200
TOTAL:	$7,895	$950	$820	$10,000	$16,000	$35,665

Schreiber, Grana & Yonley, Inc. proposes to provide services necessary to complete all activities on a time-and-expense basis. The budget outlined in Table 1 will not be exceeded without prior approval from Knapheide. All subcontractor invoices will be forwarded directly to Knapheide for payment.

Upon your approval of this proposal, Schreiber, Grana & Yonley, Inc. will contact Mr. Doug Allen of the Missouri Department of Natural Resources (MDNR) in order to present and discuss the anticipated scope of work. This will allow the MDNR an opportunity to present any questions, as well as to offer any advice regarding the project. A preliminary discussion regarding the scope of work outlined in this proposal was held with Mr. Allen on May 9, 1995.

Upon completion of this, Schreiber, Grana & Yonley, Inc. will proceed with the implementation of the final, approved wood preservative treatment building closure process.

Should you have questions or require further information, please contact the undersigned at (314) 349-8399. Schreiber, Grana & Yonley, Inc. appreciates the opportunity to provide our services to Knapheide.

Sincerely,

SCHREIBER, GRANA & YONLEY, INC.

Allen L. Steinkamp, C.P.G.
Staff Hydrogeologist

Douglas L. Abeln
Engineering Manager

ALS/DLA/cct

Attachment

cc: Ms. Sandra L. Oberkfell - Rudnick & Wolfe

sgy\sgy22\knp3436b.pro

cc: Bryce 7-31-95
D

SCHREIBER GRANA & YONLEY INCORPORATED
ENVIRONMENTAL ENGINEERS

271 Wolfner Drive • Saint Louis, Missouri 63026
314/349-8399 • Fax 314/349-8384

July 25, 1995

Ms. Sandra L. Oberkfell
Rudnick & Wolfe
203 North LaSalle Street
Chicago, IL 60601-1293

Re: Wood Treatment Building PCP Waste Disposal
Rollins/Aptus Scope of Services

Dear Ms. Oberkfell:

This letter has been prepared according to your July 13, 1995 verbal request involving documentation of the services and unit costs associated with the transportation and disposal of various materials related to a wood treatment building located at The Knapheide Mfg. Co. (Knapheide) facility in West Quincy, Missouri.

A letter dated January 4, 1995 from Westinghouse Environmental Services Business Unit, at that time the parent company of Aptus, Inc. (Aptus), contained the following unit costs to conduct activities involving the disposal of liquid and sludge containing pentachlorophenol (PCP; waste code F032) from an above ground storage tank (AST) and a dip tank located in an existing wood treatment building at the Knapheide facility:

1) **Transportation**: 390 mi

- Transportation of liquid from West Quincy, Missouri to Coffeyville, Kansas: ~~$4.00 per loaded mile~~.
- Transportation of containerized sludge from West Quincy, Missouri to Coffeyville, Kansas: ~~$0.14 per pound~~.
- Demurrage after two hours: $75.00 per hour

2) **Disposal**:

- Incineration of liquid at the Aptus-Coffeyville, Kansas facility: $0.30 per pound
- Incineration of sludge at the Aptus-Coffeyville, Kansas facility: $1.10 per pound (includes a repacking fee)
- Kansas RCRA Waste Treatment fee: $10.00 per ton

3) **Other Charges**:

- Waste analysis/profiling fee per waste stream: $550.00

Subsequent to the January 4, 1995 letter, Aptus was sold to Rollins Environmental, Inc. (Rollins). An April 13, 1995 conversation between Mr. Allen L. Steinkamp of Schreiber, Grana & Yonley, Inc. and Mr. John Getzinger of Rollins/Aptus indicated that the costs contained in the January 4, 1995 letter would remain valid for six (6) months, i.e., June 4, 1995, after which time a six (6) percent cost increase would occur.

The scope of services to be provided by Rollins/Aptus regarding the liquid/sludge PCP disposal are directly related to the scope of work described in the June 2, 1995 proposal sent to Mr. Harold D. Huggins of Knapheide. These tasks are as follows:

1) **PCP Waste Analysis/Profiling**

The liquid contents of the AST will be analyzed by Rollins/Aptus in order to obtain the appropriate waste characterization/acceptance at the Rollins/Aptus facility in Coffeyville, Kansas. This sample analysis will include RCRA metals, reactivity, corrosivity, ignitability, water percentage, BTU, ash and total halogen.

2) **PCP Liquid Disposal**

Upon receipt of PCP waste stream approval from Rollins/Aptus, the liquid contents of the AST and dip tank (if any) will be pumped by Schreiber, Grana & Yonley, Inc. personnel or a subcontractor into an appropriate transportation vehicle(s) to be supplied by Rollins/Aptus. The contents will be transported by Rollins/Aptus and incinerated as F032/D037/D001 hazardous waste at the Rollins/Aptus facility in Coffeyville, Kansas.

3) **PCP Sludge Disposal**

Sludge and scale will be removed from the AST and dip tank by a Schreiber, Grana & Yonley, Inc. subcontractor. The sludge/scale and tank cleaning rinsate will be containerized in 55-gallon drums. A Schreiber, Grana & Yonley, Inc. subcontractor will load such into appropriate transportation vehicle(s) to be supplied by Rollins/Aptus. All sludge/scale and rinsate generated during the cleaning process will be transported by Rollins/Aptus as F032/D037/D001 hazardous waste and incinerated at the Rollins/Aptus facility in Coffeyville, Kansas.

Please review this correspondence at your earliest convenience and direct questions regarding any of the information presented herein to the undersigned at (314) 349-8399.

Sincerely,

SCHREIBER, GRANA & YONLEY, INC.

Allen L. Steinkamp, C.P.G.
Staff Hydrogeologist

Douglas L. Abeln
Engineering Manager

ALS/DLA/cct

cc: Mr. Gerry Korb - The Knapheide Mfg. Co.

07/aptuspcp.ltr

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 12 1991

OFFICE OF ENFORCEMENT

MEMORANDUM

SUBJECT: Policy on the Use of Supplemental [redacted] Environmental Projects in EPA Settlements

FROM: James M. Strock
Assistant Administrator

TO: Regional Administrators
Deputy Regional Administrators
Regional Counsels
Regional Program Division Directors
Assistant Administrators
General Counsel
Program Compliance Directors
Associate Enforcement Counsels

This memorandum transmits the new Agency policy on the use of "supplemental environmental projects" in Agency consent orders and decrees. It amends GM-22, "A Framework for Statute-Specific Approaches to Penalty Assessments: Implementing EPA's Policy on Civil Penalties (issued February 16, 1984), by replacing and superseding the section on "Alternative Payments" on pages 24-27 of that document. Please note that this policy amends only the section on "alternative payments" and that all other sections of GM-22 remain in effect.

In the past, the Agency has used several terms to describe substantive settlement conditions (usually projects or activities), other than those required as injunctive relief to correct the underlying violation, which the defendant/respondent may undertake in exchange for a reduction in the amount of the assessed civil penalty. In GM-22, these conditions are called "alternative payments." They also have periodically been referred to as "mitigation projects" or "environmentally beneficial expenditures." The Agency's past experience with these projects has sometimes been problematic, in part because GM-22 did not fully describe the kinds of projects that are appropriate for penalty reduction, the situations under which they should be considered, and the amount by which the penalty demand can be reduced.

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Supplemental Environmental Projects

A. Introduction

In settlement of environmental enforcement cases, the United States will insist upon terms which require defendants to achieve and maintain compliance with Federal environmental laws and regulations. In certain instances, additional relief in the form of projects remediating the adverse public health or environmental consequences of the violations at issue may be included in the settlement to offset the effects of the particular violation which prompted the suit. As part of the settlement, the size of the final assessed penalty may reflect the commitment of the defendant/respondent to undertake environmentally beneficial expenditures ("Supplemental Environmental Projects").

Even when such conditions serve as a basis for considering a Supplemental Environmental Project, the Agency's penalty policies will still require the assessment of a substantial monetary penalty according to criteria described in "Implementing EPA's Policy on Civil Penalties" (GM-22), generally at a level which captures the defendant/respondent's economic benefit of noncompliance plus some appreciable portion of the gravity component of the penalty. Each administrative settlement in which a "horizontal" Supplemental Environmental Project or substitute performance is proposed (see below) must be approved by the Assistant Administrator for Enforcement, and, where required by the Agency's delegations policy, the media Assistant Administrator. Judicial settlements including any of the projects described herein will continue to require the approval of the Assistant Administrator for Enforcement and also be approved by the Assistant Attorney General for the Environment and Natural Resources Division.

EPA will expand its approach to Supplemental Environmental Projects while also maintaining a nexus (relationship) between the original violation and the supplemental project. EPA may approve a supplemental project so long as that project furthers the Agency's statutory mandates to clean up the environment and deter violations of the law.[1] Accordingly, supplemental projects may be considered if: (1) violations are corrected through

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[1] A mitigation project cannot be used to resolve violations at a facility other than the facility or facilities which are the subject of the enforcement action. This would run counter to deterrence objectives, since it would effectively give a company a penalty "break" for violations at one facility for undertaking what amounts to legally required compliance efforts at another facility. Such a scenario would operate to reward recalcitrance, poor-management practices, and non-compliance.

actions to ensure future compliance; (2) deterrence objectives are served by payment of a substantial monetary penalty as discussed above; and (3) there is an appropriate "nexus" or relationship between the nature of the violation and the environmental benefits to be derived from the supplemental project.

All supplemental projects must improve the injured environment or reduce the total risk burden posed to public health or the environment by the identified violations. The five categories of permissible supplemental activities are (1) pollution prevention, (2) pollution reduction, (3) environmental restoration, (4) environmental auditing projects, and (5) public awareness projects which are directly related to addressing compliance problems within the industry within which the violation took place. EPA negotiators should make it clear to a defendant/respondent interested in proposing a supplemental project that the Agency is looking only for these types of projects (cf. section F, below).

Under no circumstances will a defendant/respondent be given additional time to correct the violation and return to compliance in exchange for the conduct of a supplemental project.

B. Categories of Supplemental Environmental Projects

Five categories of projects will be considered as potential Supplemental Environmental Projects, subject to meeting the additional criteria described in succeeding sections.

1. Pollution Prevention Projects

Consistent with the Agency's forthcoming Pollution Prevention Policy Statement and Pollution Prevention Strategy, a pollution prevention project substantially reduces or prevents the generation or creation of pollutants through use reduction (i.e., by changing industrial processes, or by substituting different fuels or materials) or through application of closed-loop processes. A project which substantially reduces the discharge of generated pollutants through innovative recycling technologies may be considered a pollution prevention project if the pollutants are kept out of the environment in perpetuity.

2. Pollution Reduction Projects

A pollution reduction project is defined as a project which goes substantially beyond compliance with discharge limitations to further reduce the amount of pollution that would otherwise be discharged into the environment. Examples include a project that reduces the discharge of pollutants through more effective end-of-pipe or stack removal technologies; through improved operation and maintenance; or recycling of residuals at the end of the

pipe.[2]

Sometimes an acceptable pollution reduction project may encompass an "accelerated compliance project". For instance, assuming there is a statutory or regulatory schedule for pollution phaseout or reduction (or is likely to be proposed in the foreseeable future, e.g., an upcoming rulemaking), if a defendant/respondent proposes to complete a phaseout or reduction at least 24 months ahead of time, and such proposal for accelerated compliance can be demonstrated to result in significant pollution reduction (i.e., one can objectively quantify a substantial amount of pollution reduction due to the accelerated compliance) then such a proposal may proceed to be evaluated according to the rest of the appropriateness criteria below. In addition, if the defendant/respondent substitutes another substance for the one being phased out, he has the burden to demonstrate that the substance is non-polluting, otherwise no supplemental environmental project will be allowed and, indeed, additional liability may accrue.

3. Projects Remediating Adverse Public Health or Environmental Consequences (Environmental Restoration Projects)

An environmental restoration project is defined as a project that not only repairs the damage done to the environment because of the violation, but which goes beyond repair to enhance the environment in the vicinity of the violating facility.

4. Environmental Auditing Projects

Environmental Auditing that represents general good business practices are not acceptable supplemental projects under this policy (cf. Section E).[3] However, such a project may be considered by the Agency if the defendant/respondent undertakes additional auditing practices designed to seek corrections to existing management and/or environmental practices whose deficiencies appear to be contributing to recurring or potential

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[2] Where the obligation to reduce the pollution is already effective, or is subject to an "as soon as practicable" or comparable standard, a proposal to further reduce pollution would not fulfill the definition of a pollution reduction project, and would not be appropriate.

[3] It should be noted that the Agency has the authority to require an environmental audit as an element of injunctive relief when it deems it appropriate given the fact pattern surrounding the violation subject to the usual limits on the scope of injunctive relief.

violations. These other potential violations may encompass not only the violating facility, but other facilities owned and operated by the defendant/respondent, in order to identify, and correct as necessary, management or environmental practices that could lead to recurring or future violations of the type which are the basis for the enforcement action.[4]

Audit projects which fall within the scope of this policy can be justified as furthering the Agency's legitimate goal of encouraging compliance with and avoiding, as well as detecting, violation of federal environmental laws and regulations. Such audits will not, however, be approved as a supplemental project in order to deal with similar, obvious violations at other facilities.

5. Enforcement-Related Environmental Public Awareness Projects

These projects are defined as publications, broadcasts, or seminars which underscore for the regulated community the importance of complying with environmental laws or disseminate technical information about the means of complying with environmental laws. Permissible public awareness projects may included sponsoring industry-wide seminars directly related to correcting widespread or prevalent violations within an industry, e.g., a media campaign funded by the violator to discourage fuel switching and tampering with automobile pollution control equipment or one which calls for the defendant/respondent to organize a conference or sponsor a series of public service announcements describing how violations were corrected at a facility through the use of innovative technology and how similar facilities could also implement these production changes.

Public Awareness Projects directly serve Agency deterrence objectives and contribute indirectly to Agency enforcement efforts. Though they are not subject to the nexus requirement applicable to other supplemental environmental projects, they must be related to the type of violations which are/were the subject of the underlying lawsuit. Defendants/respondents who fund or implement a public awareness project must also agree to publicly state in a prominent manner that the project was undertaken as part of the settlement of a lawsuit brought by the Agency or a State. These projects will be closely scrutinized to ensure that they fulfill the legitimate objectives of this policy in all respects.

6. Projects Not Allowed as Supplemental Projects

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[4] Of course, this requirement is subject to the qualifications of footnote 1.

Several types of projects, which have been proposed in the past, would no longer be approveable Supplemental Environmental Projects. Examples of projects that would not be eligible include:

1. general educational or environmental awareness-raising projects (e.g., sponsoring public seminars about, or inviting local schools to tour, the environmental controls at a facility; promoting recycling in a community);

2. contribution to research at a college or university concerning the environmental area of noncompliance or concerning any other area of environmental study;

3. a project unrelated to the enforcement action, but otherwise beneficial to the community e.g., contribute to local charity);

C. "Nexus" (Relationship) of Supplemental Environmental Project to the Violation

The categories of Supplemental Environmental Projects described above (except for Public Awareness Projects) may be considered if there is an appropriate "nexus" or relationship between the nature of the violation and the environmental benefits to be derived from the type of supplemental project. For example, the "nexus" between the violation and an environmental restoration project exists when it remediates injury caused by the same pollutant at the same facility giving rise to the violation. Such projects must further the Agency's mission as defined by appropriate statutory mandates, including the purpose sections of the various statutes under which EPA operates. The Agency will evaluate whether the required "nexus" between the pollutant discharge violation and the project exists.

1. Requirements for Remediation Projects

Examples of circumstances presenting an appropriate nexus include:

a. A project requiring the purchase of wetlands which then act to purge pollutants unlawfully discharged in receiving waters. In this example, EPA will evaluate whether the required "nexus" between the pollutant discharge violations and the wetlands to be purchased can be established. EPA will evaluate the nexus between the project and the violation in terms of both geography and the pollution treatment benefits of the wetlands.

b. A project which calls for the acquisition and preservation of wetlands in the immediate vicinity of wetlands injured by unlawful discharges, in order to replace the environmental services lost by reason of such injury.

c. A "restoration" project, such as a stream sediment characterization or remediation program to determine the extent and nature of pollution caused by the violation and to formulate and implement a plan for remediating sediment near the facility. Such a stream sediment characterization or restoration project, if obtainable as injunctive relief pursuant to the statutory provisions of the Clean Water Act in the particular case, would not be approveable as a supplemental project.

2. Nexus for Pollution Prevention/Pollution Reduction/ Environmental Restoration/Environmental Auditing Projects

The "nexus" for pollution prevention, pollution reduction, environmental restoration and environmental auditing projects may either be vertical or horizontal, as described below.

a. Vertical "Nexus"

A "vertical" nexus exists when the supplemental project operates to reduce pollutant loadings to a given environmental medium to offset earlier excess loadings of the same pollutant in the same medium which were created by the violation in question. Even if the violations are corrected by reducing pollutant loadings to the levels required by law, further reductions may be warranted in order to alleviate the risk to the environment or public health caused by past excess loadings. Typically, such projects follow a violation back into the manufacturing process to address the root cause of the pollution. Such reductions may be obtained from the source responsible for the violation or, in appropriate cases, may be obtained from another source, either upstream, up gradient or upwind of the responsible source.

For example, if pollutants were discharged in violation of the Clean Water Act from a facility at a certain point along a river, an acceptable pollution reduction project would be to reduce discharges of that same pollutant at an upstream facility on the same river. Another classic example of a "vertical" pollution prevention activity is the alteration of a production process at a facility which handles a portion of the manufacturing process antecedent to that which caused the violation of the regulatory requirement in a way that yields reductions or total elimination of the residual pollutant

discharges to the environmental media assaulted by the violation. Both of these examples present the necessary nexus between the violation and the supplemental project.

b. Horizontal "Nexus"

A "horizontal" nexus exists when the supplemental project involves either (a) relief for different media at a given facility or b) relief for the same medium at different facilities. The nexus between supplemental projects in this category and the violation must be carefully scrutinized. The nexus will be met only if the supplemental project would reduce the overall public health or environmental risk posed by the facility responsible for the violation or enhances the prospects for reducing or eliminating the likelihood of future violations substantially similar to those which are the basis for the enforcement action. Approval of such projects is appropriate only where the terms of the settlement insure that the defendant/respondent will be subject to required injunctive relief prescribed by the compliance and deterrence policies stated in the various Acts and their implementing regulations. In those circumstances, the Agency believes the required nexus to the statutory goals has been met.

Following are examples of approveable projects demonstrating a "horizontal" nexus to the violation:

1. Violations of the Resource Conservation and Recovery Act or the Clean Water Act may have exposed the neighboring community to increased health risks because of drinking water contamination. In addition to correcting these violations, it may be appropriate to reduce toxic air emissions from the same facility in order to compensate for the excess health risk to the community which resulted from the RCRA or CWA violations.

2. A supplemental project is proposed which reduces pollutant discharges at a defendant/respondent's other facilities within the same air quality basin or water shed as at the facility which violated legal requirements applicable to releases of the same pollutant. In this case, the overall supplemental project would be designed to reduce the overall health or environmental risk posed by related operations to the environment or to the health of residents in the same geographic vicinity by reducing pollutant discharges to the air basin or watershed and to compensate for past excess discharges.

3. A supplemental project is proposed which reduces pollutant discharges at a defendant/respondent's other (non-violating) facility(ies). Such a project would be approveable where the violating and non-violating facilities are engaged in the same production activities and use the same production processes, where appreciable risks of violations and legal requirements applicable to releases of that same pollutant substantially similar to those at the violating facility are posed by the non-violating facility (ies), and where the defendant/respondent can establish that significant economies of scale would be achieved by incorporating pollution prevention process changes at both the violating and non-violating facilities. Alternatively, the settlement could call for the defendant/respondent to substitute input chemicals across all such facilities (e.g., replace higher toxic solvents with lower toxic solvents at all paint manufacturing plants) or to reduce the emissions loadings of particular emissions at all such facilities as part of a NESHAPS settlement. Such projects would, therefore, reduce the overall health or environmental risk posed by such operations to the environment or to the health of residents in the same geographic vicinity.

4. In settlement of a TSCA PMN violation for manufacturing a polymer without providing formal advance notice at a facility, the defendant/respondent could establish a closed loop recycling system to reduce the amount of that facility's product manufacturing waste which must be sent to a RCRA Subtitle C landfill. Operating the facility in violation of TSCA created a risk of unwarranted health or environmental injury. If TSCA penalty and injunction requirements have been met, then the supplemental project could be justified on the grounds that it would compensate for this unwarranted risk by reducing the overall health or environmental risk presented by the facility.

After the project category and "nexus" criteria have been met, a potential supplemental project must also meet the criteria described in the following sections, below. Most of the conditions below applied in the past, but some are new. All of these conditions must be met before a supplemental project may be accepted.

D. <u>Status of the Enforcement Action/Compliance History of Defendant/Respondent</u>

Any defendant/respondent against whom the Agency has taken an enforcement action may propose to undertake a supplemental project at any time prior to resolution of the action, although the Agency should consider both the status of the litigation/

administrative action and the resources that have been committed to it before deciding whether to accept it. In addition, the respondent's enforcement history and capability to successfully complete the project must be examined during evaluation of a supplemental project proposal.

The Agency negotiators must also consider whether the defendant/respondent has the technical and economic resources needed to successfully implement the supplemental project. In addition, a respondent who is a repeat offender may be a less appropriate respondent from which to receive and evaluate a supplemental project proposal than a first time violator.

E. Main Beneficiary of a Supplemental Environmental Project

The Federal Government's sole interest in considering supplemental projects is to ameliorate the adverse public health and/or environmental impacts of violations. Projects are not intended to reward the defendant/respondent for undertaking activities which are obviously in his economic self-interest (e.g., update or modernize a plant to become more competitive). Therefore, as a general rule, these projects will usually not be approved when they represent a "sound business practice" , i.e., capital expenditures or management improvements for which the Federal negotiators may reasonably conclude that the regulated entity, rather than the public, is likely to receive the substantial share of the benefits which accrue from it.

* The only exception to the prohibition against acceptance of a supplemental project which represents a "sound business practice" is for a pollution prevention project. Although a pollution prevention project can be viewed as a "sound business practice" since (by definition) it is designed both to make production more efficient and reduce the likelihood of noncompliance, it also has the advantage of potentially providing significant long-term environmental and health benefits to the public. Therefore, the "sound business practice" limitation will be waived only for pollution prevention projects if the Federal negotiators decide, after due consideration and upon a clear demonstration by the defendant/respondent as to what the public health and/or environmental benefits would be, that those benefits are so substantial that the public interest would be best served by providing additional incentives to undertake the project.

F. Extent to Which the Final Assessed Penalty can Reflect a Supplemental Environmental Project

Although supplemental projects may directly fulfill EPA's goal of protecting and restoring the environment, there is an

important countervailing enforcement goal that penalties should have the strongest possible deterrent effect upon the regulated community. Moreover, the Agency's penalty policies require the assessment of a substantial monetary penalty according to criteria described in "Implementing EPA's Policy on Civil Penalties" (GM-22), generally at a level which captures the defendant/respondent's economic benefit[5] of noncompliance plus some appreciable portion of the gravity component of the penalty.[6]

In addition, EPA must not lower the amount it decides to accept in penalties by more than the after-tax amount the violator spends on the project. EPA should calculate the net present after tax value of the supplemental project at the time that the assessed penalty is being calculated. If a supplemental project is approved, a portion of the gravity component of the penalty may be mitigated by an amount up to the net present after-tax cost of the supplemental project, depending on the level of environmental benefits to the public.

G. Supplemental Environmental Projects for Studies

Supplemental Environmental Projects for studies will not be allowed without an accompanying commitment to implement the results. First, little or no environmental benefit may result in the absence of implementation. Second, it is also quite possible that this type of project is one which the violator could reasonably be expected to do as a "sound business practice".

Pollution prevention, pollution reduction and environmental restoration studies, as well as environmental audits, are defined narrowly for purposes of meeting Supplemental Environmental Project policy guidelines. They will only be eligible as supplemental projects if they are a part of an Agency-approved set of actions to reduce, prevent, or ameliorate the effects of pollution at the respondent's facility (e.g., a comprehensive waste minimization or emissions reduction program). The amount

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[5] Where a violation is found which did not confer a significant economic benefit, e.g. a failure to notify, the settlement must still include payment of a penalty which at least captures a portion of the proposed gravity component.

[6] If a defendant/respondent can establish through use of documents and affidavits sworn under penalty of perjury that it cannot afford to pay the civil penalty derived from use of the appropriate civil penalty policy, the Agency will consider entering into an "ability to pay settlement" for less than the economic benefit of non-compliance.

attributable to a supplemental project may include the costs of necessary studies. Nonetheless, a respondent's offer to conduct a study, without an accompanying commitment to implement the results, will not be eligible for penalty reduction. In considering the applicability of a proposed study, the Agency negotiators will consider the likelihood of success, i.e., substantial pollution reduction or prevention, in making a determination.

While studies are not by themselves eligible supplemental environmental projects, to encourage pollution prevention, EPA will make a limited exception to this general approach pollution prevention studies. Such studies will be eligible for a penalty offset when they are part of an Agency-approved set of pollution prevention activities at a facility and are designed to correct the violation (e.g., a recycling feasibility study, waste minimization opportunity assessment, or waste reduction audit).

The size of the penalty offset may include the costs of the studies. The commitment to conduct the study also must be tangible (e.g., the project completed on schedule, etc.). The U.S. must have the authority to review the completed study to decide whether it is technologically and/or economically feasible to implement the results. Should the U.S. decide that the results can be implemented but the defendant/ respondent is unwilling to do so, the "offset" for the pollution prevention study will be rescinded and the final assessed penalty must be paid in full (cf. Section J. on payment assurance).

H. Substitute Performance of Supplemental Environmental Projects

A supplemental environmental project which meets the other criteria of this policy may consist in part or whole of substitute performance by an entity or entities other than the violator. Such a substitute must bear a reasonable geographical or media-specific relationship to the underlying violation. This substitute performance must be assured through agreements which are enforceable by EPA, and may consist of agreements for emissions limits, process design or input changes, natural resource preservation or conservation easements, or other means of achieving compliance with the terms of the proposed supplemental environmental project. In the event a violator proposes acceptable substitute performance, EPA will credit the violator with an amount up to the net after tax cost of the project as if it were being performed by the violator. The violator, will, however, remain responsible for the performance of the project or the payment of the penalty offset if substitute performance is not completed.

I. Level of Concurrence

There may be practical problems in administering cross-media and/or cross-regional projects. Staff allocations for oversight requirements will necessarily increase, as will the level of resources needed for tracking purposes since tracking a supplemental project is more complex than tracking whether a payment is made. In addition, the likelihood of new issues emerging due to noncompliance with the conditions of the project is significant.

The extent of coordination/concurrence for a supplemental project which involved more than one Region will vary according to the nature and complexity of the proposal. All affected Regions must be notified about a supplemental project which would have only a modest impact on facilities in those Regions (e.g., a commitment to undertake an environmental audit at all of the defendant/respondent's facilities across the country). However, all affected Regions would have to concur in a proposed supplemental project which would involve significant oversight resources or activities (e.g., a pollution prevention activity which required major construction or process changes). Also, all affected EPA parties must be consulted on their respective oversight responsibilities. As stated previously, judicial settlements, including any of the projects described herein, will continue to require the approval of the Assistant Administrator for Enforcement and also be approved by the Assistant Attorney General for the Environment and Natural Resources Division.

Each proposed administrative settlement which has a "horizontal" nexus to the violation or which involves substitute performance also must be approved by the Assistant Administrator for Enforcement and, where required by the Agency's delegations policy, the media Assistant Administrator.

J. Oversight/Tracking

Supplemental Environmental Projects may require third-party oversight. In such cases, these oversight costs should be borne by the respondent, and it must agree as a part of the settlement to pay for an independent, third-party auditor to monitor the status of the supplemental project. The auditor will be required by the settlement to submit specific periodic reports, including a final report evaluating the success or failure of the supplemental project, and the degree to which the project satisfied these guidelines. All reports must be submitted to EPA. Upon request, EPA may provide copies of the reports, or copies of portions of the reports, to the respondent. The timing and amount of reports released to the defendant/respondent shall be at EPA's sole discretion.

Obviously, a certain amount of government oversight will be required to monitor compliance with the terms of an agreement that contains a supplemental project. "Horizontal" pollution prevention or pollution reduction supplemental projects which involve more than one Region (e.g., production changes at more than one facility) may require additional oversight, and the estimated amount of time and resources required for effective oversight is another criteria which the negotiators should use to determine whether to include the project in the settlement agreement.

The consent order or decree shall specify overall timeliness and milestones to be met in implementing the supplemental project. If the defendant/respondent does not comply satisfactorily with the terms of the supplemental project, he shall be liable for the amount by which the assessed penalty was reduced (with applicable interest). The consent order or decree should contain a mechanism for assuring prompt payment, e.g., through stipulated penalties consistent with the other sections of this policy or, if appropriate, the posting of a bond (in the amount by which the assessed penalty was reduced) to be forfeited if the supplemental project is not fully implemented.

K. Documenting Approval Of Supplemental Environmental Project Proposals

In all cases where supplemental projects are approved as part of the settlement, the case file should contain documentation showing that each of the appropriateness criteria listed above have been met in that particular case. A copy of the evaluation and approval document shall be sent to the Office of Enforcement and the National Compliance Officer concurrent with the approval of the Regional Administrator, or other authorized approving official, and to the Assistant Attorney General for the Environment and Natural Resources Division.

L. Coverage of this Policy

This document revises and supercedes the appropriate sections of the Agency's general civil penalty policy (GM-22), and constitutes Agency policy relating to supplemental environmental projects. Media-specific penalty policies will be revised as soon as possible to be consistent with it. During this interim period, in the event of any conflict between this general policy and a media-specific policy, this policy is controlling.

GK 8/19/93

DATE: 08/18/93 The Knapheide Mfg Co

TO: Norman Haerr
Fabius Drainage District

FROM: T Mentzer

SUBJECT: FEMA

Enclosed, please find summary and detail of Flood 1993 items to date for claims submission to FEMA for The Knapheide Mfg Co.

Summary - Use as billing to District

Labor - Wage and Salary Personnel		$341,250
Machinery & Equipment		$ 60,886
Supplies Used		$ 1,402
Supplies Purchased		$125,353
Sand Bags	30,000 @ .20ea	$ 6,000
Boat Loss-submerged 30+ days		$ 3,486
Total		$538,377

If there is anything Knapheide can do to help the Drainage District, please give me a call; Clerical assistance, Manpower, etc.

Thank you for your assistance in coordinating the filing.

J. T. Mentzer
Accounting Manager

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
2200 Churchill Road, Springfield, IL 62794-9276
217/782-2113

OPERATING PERMIT - REVISED

PERMITTEE

The Knapheide Manufacturing Company
Attn: Harold Huggins
436 South Sixth Street
Quincy, Illinois 62301

Application No.: 93090031
I.D. No.: 001065AFY
Applicant's Designation: 0993001
Date Received: July 18, 1994
Subject: Paint Booths and Associated Equipment
Date Issued: September 28, 1994
Operating Permit Expiration Date: April 1, 1996
Location: 436 South Sixth Street, Quincy

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of eight paint booths with filters, three bake ovens, welding equipment, wood working machine with cyclone dust collector and one gas-fired boiler as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. Usage of coatings and solvents, volatile organic material (VOM) content of each, and VOM emissions from coating operations shall not exceed the following:

	Usage		VOM Content	VOM Emissions	
Material	Gal/Mo[a]	Gal/Yr	Lb/Gal[b]	Lb/Mo[a]	T/Yr
Coating[c]	3820/4780	41200	5.25	20050/25100	108.2
Solvent[d]	2930/3670	31650	7.8	22850/28650	123.5
			Total		231.7
			Credit for waste		35.8
					195.9

a The Permittee divides their quarters into four, four and five week periods. These values are for four week and five week months, respectively. Values are 25% more for five week months.
b Monthly weighted average value
c As received
d Including hardeners, reducers, accelerators and any other solvent added to coating or used for cleanup

b. The VOM content of coatings as delivered to the coating applicator shall not exceed 6.6 lb/gal. This may be determined from standard mix ratios and the VOM content of the materials in the mix.

2. Firing rate, hours of operation and emissions of nitrogen oxides (NOx) from the gas-fired Cleaver Brooks boiler shall not exceed the following:

Firing Rate (mmbtu/hr)	NOx Emissions (lb/hour)	(ton/yr)
4.0	0.4	1.8

3. This permit is issued based on negligible emissions of particulate matter from the welding equipment, woodworking operations/cyclone and coating equipment, i.e., paint booths and ovens. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.

4. Compliance with annual limits shall be determined from a running total of 12 months of data.

5a. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Agency to review compliance with the limits in Condition 1 through 3.

   i. Coating and solvent usage (gal/mo)
   ii. VOM content of coatings and solvent (lb/gal)
   iii. Calculation of monthly weight average VOM content of coatings shall be done by the 15th day of the following month.
   iv. VOM emissions (lb/month)

b. The Permittee shall maintain records of the VOM contained in coating waste sent offsite (weight and % VOM).

c. These records shall be retained for two years and shall be available for inspection by the Agency.

6. This permit is issued based upon the provisions of Pollution Control Board Variance 93-169.

This permit has been revised to include operation of the equipment described in construction permit 94070070 for a new bake oven and removal of two booths and to revise the paint usage values.

If you have any questions on this, please call Dan Punzak at 217/782-2113.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:lo/0415P/83-4sp

cc: Region 2

Illinois
Environmental
Protection Agency

2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

March 1994

TITLE 35:
ENVIRONMENTAL PROTECTION

SUBTITLE B:
AIR POLLUTION

Chapter I:
POLLUTION CONTROL BOARD

State of Illinois

Rules and Regulations

This printing of Title 35: Environmental Protection,
Subtitle B: Air Pollution, Chapter I: Pollution Control Board
includes amendments through March, 1994

Printed on Recycled Paper

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER c: EMISSIONS STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 215
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS

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to meet the requirements of the Occupational Safety and Health Act (29 U.S.C. Section 651 et seq.).

2) Solvent carryout emissions are minimized by:

A) Racking parts for best drainage; and

B) Maintaining the vertical conveyor speed at less than 3.3 m/min (11 ft/min);

3) Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;

4) Solvent leaks are repaired immediately;

5) Water is not visually detectable in solvent exiting from the water separator; and

6) Downtime covers are placed over entrances and exits of conveyorized degreasers immediately after the conveyors and exhausts are shut down and not removed until just before start-up.

b) Equipment Requirements: No person shall operate a conveyorized degreaser unless:

1) The degreaser is equipped with a drying tunnel, rotating (tumbling) basket or other equipment sufficient to prevent cleaned parts from carrying out solvent liquid or vapor;

2) The degreaser is equipped with the following switches:

A) A device which shuts off the sump heat source if the amount of condenser coolant is not sufficient to maintain the designed vapor level;

B) A device which shuts off the spray pump or the conveyor if the vapor level drops more than 10 cm (4 in) below the bottom condenser coil; and

C) A device which shuts off the sump heat source when the vapor level exceeds the design level;

3) The degreaser is equipped with openings for entrances and exits that silhouette workloads so that the average clearance between the parts and the edge of the degreaser opening is less than 10 cm (4 in) or less than 10 percent of the width of the opening;

4) The degreaser is equipped with downtime covers for closing off entrances and exits when the degreaser is shut down; and

5) The degreaser is equipped with one of the following control devices, if the air/vapor interface is larger than 2.0 square meters (21.6 square feet):

A) A carbon adsorption system with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area when downtime covers are open, and exhausting less than 25 ppm of solvent by volume averaged over a complete adsorption cycle; or

B) Any other equipment or system of equivalent emission control as approved by the Agency. Such equipment or system may include a refrigerated chiller.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.185 Compliance Plan

a) Solvent cleaning and degreasing were subject to certain compliance dates which are summarized in Appendix C. Compliance programs were required under 35 Ill. Adm. Code 201, Subpart H.

b) Cold cleaning degreasers were not required to submit a compliance plan or project completion schedule under 35 Ill. Adm. Code 201, Subpart H.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

SUBPART F: COATING OPERATIONS

Section 215.202 Compliance Schedules

Owners or operators of coating lines were required to take certain actions to achieve compliance which are set forth in Appendix C.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.204 Emission Limitations for Manufacturing Plants

No owner or operator of a coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material pursuant to this Part, delivered to the coating applicator:

a) Automobile or Light Duty Truck Manufacturing Plants

1) In Cook County

	kg/l	lb/gal
Prime coat	0.14	(1.2)
Prime surfacer coat	0.34	(2.8)

(Board Note: The prime surfacer coat limitation is based upon a transfer efficiency of 30 percent. The prime surfacer coat limitation shall not apply until December 31, 1982.)

	kg/l	lb/gal
Top coat	0.34	(2.8)

(Board Note: The limitation is based upon a transfer efficiency of 30 percent. The topcoat limitation shall not apply until December 31, 1985.)

	kg/l	lb/gal
Final repair coat	0.58	(4.8)

(Board Note: The limitation shall not apply until December 31, 1985.)

2) In Boone County

	kg/l	lb/gal
Prime coat	0.14	(1.2)
Prime surfacer coat	0.34	(2.8)
Top coat	0.34	(2.8)

(Board Note: The top coat limitation shall not apply if by December 31, 1984 a limitation of 0.43 kg/l (3.6 lb/gal) is achieved and the top coat is applied with a transfer efficiency of not less than 55 percent and by December 31, 1986, the top coat is applied with a transfer efficiency of not less than 65 percent.)

	kg/l	lb/gal
Final repair coat	0.58	(4.8)

3) In the remaining counties

	kg/l	lb/gal
Prime coat	0.14	(1.2)
Prime surfacer coat	0.34	(2.8)
Top coat	0.34	(2.8)
Final repair coat	0.58	(4.8)

b) Can Coating

	kg/l	lb/gal
1) Sheet basecoat and overvarnish	0.34	(2.8)
2) Exterior basecoat and overvarnish	0.34	(2.8)
3) Interior body spray coat	0.51	(4.2)
4) Exterior end coat	0.51	(4 2)
5) Side seam spray coat	0.66	(5.5)
6) End sealing compound coat	0.44	(3.7)

c) Paper Coating

	kg/l	lb/gal
1) All paper coating except as provided in subsection (c)(2)	0.35	(2.9)
2) Specialty High Gloss Catalyzed Coating	0.42	(3.5)

(Board Note: These limitations shall not apply to equipment used for both printing and paper coating.)

	kg/l	lb/gal
d) Coil Coating	0.31	(2.6)
e) Fabric Coating	0.35	(2.9)
f) Vinyl Coating	0.45	(3.8)
g) Metal Furniture Coating	0.36	(3.0)
h) Large Appliance Coating	0.34	(2.8)

(Board Note: The limitation shall not apply to the use of quick-drying lacquers for repair of scratches and nicks that occur during assembly, provided that the volume of coating does not exceed 0.95 liters (1 quart) in any one eight-hour period.)

	kg/l	lb/gal
i) Magnet Wire Coating	0.20	(1.7)

j) Miscellaneous Metal Parts and Products Coating

	kg/l	lb/gal
1) Clear coating	0.52	(4.3)
2) Air dried coating	0.42	(3.5)
3) Extreme performance coating	0.42	(3.5)

4) Power driven fastener coating

a) Nail coating
Refer to limits in (j)(1), (2), (3) and (5)

b) Staple, brad and finish nail unit

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

2200 Churchill Road, Springfield, IL 62794-9276

CONSTRUCTION PERMIT

PERMITTEE:

The Knepheide Manufacturing Company
Attn: Harold Huggins
436 South Sixth Street
Quincy, IL 62306-2140

Application No.: 94070070
Applicant's Designation:
Subject: UB Bake Oven
Date Issued: August 1, 1994
Location: 436 South Sixth Street, Quincy

I.D. No.: 001065AFY
Date Received: July 18, 1994

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of one bake oven for curing of high solids coatings as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon use of the new oven for curing of high solids coatings that will be applied to metal parts in several existing coating booths. The high solids coatings contain less volatile organic material (VOM) per gallon than the current coatings and thus emissions of VOM will be reduced. Two existing coating booths (Nos. 3 and 5) will be removed to make space for this new oven. The existing coating operations are included in operating permit 93090031, into which this new oven will be incorporated.

If you have any questions on this, please call Dan Punzak at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:jar/0299Q,69

cc: Region 2

TOTAL P.01

KNAPHEIDE®
SINCE 1848
The Knapheide Mfg. Co. ▪ 436 South Sixth Street ▪ P. O. Box C-140 ▪ Quincy, Illinois 62306-2140
TEL: (217) 222-7131 ▪ FAX: (217) 222-5939 OR (800) 654-8997

September 6, 1994

MR DAN PUNZAK
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR CONTROL
1340 NORTH NINTH STREET
P O BOX 19275
SPRINGFIELD IL 52794-9275

RE: Revision to Operating Permit #001065AFY/93090031

Dear Mr. Punzak:

The construction permit (#94070070) was issued by IEPA on Aug.1, 1994 to construct this bake oven. Previously installed paint booths (#3 and #5) have been removed to make space for this new oven. The construction of the utility body bake oven designated as bake oven #3 in our application dated 7-11-94 for construction and operation permit has been completed.

As we reviewed in our meeting July 19, 1994, the change to high solids paint is having a very favorable effect on our VOC emissions. Per our discussion, I have recalculated the 1995 quantities in section 1A of permit. to be, worst case based on maximum usage, as follows:

Section 1A:

Material	Gal/Mo		Gal/Yr	Lb/Gal	Lb/Mo		Ton/Yr
	4 wk mo	5 wk mo			4 wk mo	5 wk mo	
Coating	3,818	4,773	41,205	5.25	20,046	25,057	108.16
Solvent	2,933	3,666	31,653	7.80	22,877	28,595	123.45
						Total	231.61
						Credit	35.79
						Ton/Yr	195.82

Attachment 1 and 1A indicates the production days per month and the month ending date for 1994 and 1995.

*Attachment 2 documents the reduction of coatings consumption from 4,888 gallons per month to an average of 2985 gallons per month. Solvents started at 2486 gallons per month and were reduced to an average of 1559 gallons per month. Attachment 2A is the estimated consumption for 1995 based on current usage.

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SINCE 1848

*Attachment 3 documents the reduction of average VOC pounds per gallon of coatings from 5.08 to 3.36 lbs. per gallon. Solvent is reduced from 7.01 pounds per gallon average to 5.93 pounds per gallon average. 3A indicates the continuation of the average thru 1995.

*Attachment 4 shows the starting rate in pounds of VOCS per month of; coatings 22,329 lbs.; solvent 21,128 lbs.; and total 43,457 lbs. If annualized this would have resulted in emissions of 261 tons per year! With the changes to our process and material, we estimate a monthly average emissions of; coatings 10,037 lbs.; solvent 8,679 lbs.; and total 18,716 lbs. 4A is the 1995 continuation of the average by month.

The table below compares the monthly average emissions before & after the coating changes.

	Beginning of 1994 year Emissions	Current Emissions	% Reduction
Coating	22,329 LBS.	10,037 LBS.	55%
Solvent	21,128 LBS.	8,679 LBS.	59%
Total	43,457 LBS.	18,716 LBS.	57%

With the facilities limitations in our existing temporary location, we feel this is the best we will achieve. The Knapheide Mfg. Co. is currently evaluating the latest technology of environmentally friendly finishing processes.

As of September 1, 1994, The Knapheide Mfg. Co. has not been able to purchase land for a permanet location.

Sincerely,

THE KNAPHEIDE MFG. CO.

Harold Huggins

Harold Huggins
Facilities and Environmental Engineering Manager

HH:dd

cc: Sandra Oberkfell, Esq.
Viraf Palsetia
Gerry Korb

91010060

MATERIAL SAFETY DATA SHEET

TR-10

Date of Preparation: April, 1994

Section I - Product Information

Manufacturer: Akzo Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Product Class: Solvent Blend
Packing Group: III

Emergency Telephone:
Chemtrec: 800-424-9300
Product Code: 005025
Transport Class: UN1263
Shipping Name: Paint Related Material

Section II - Hazardous Ingredients

Hazardous Ingredient	Percent weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
Propylene Glycol Methyl Ether	5-20%	107-98-2	9.5	100ppm	100ppm	6052	12000	n.av.	1.6
Diacetone Alcohol	5-20%	123-42-2	0.9	50ppm	50ppm	4000	13500	n.av.	1.8
PM Acetate	35-50%	108-65-6	3.8	n.av.	n.av.	8532	5000	n.av.	1.5
Butyl Acetate	20-35%	123-86-4	8.0	150ppm	150ppm	1400	n.av.	2000	1.7
Aromatic Naphtha Heavy	5-20%	64742-94-5	1.0	50ppm	500ppm	n.av.	n.av.	n.av.	1.0
2-Butoxyethyl Acetate*(SARA 313)*	16.1%	112-07-2	0.5	n.av.	n.av.	2400	1500	n.av.	0.8

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a (*P65*) this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 248-380F
Weight per Gallon: 7.7
Percent Volatile by Volume: 100
Volatile Organic Compounds: 7.7 lbs/gal

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 78F
Lower Explosive Limit: 0.8
NFPA Flammability: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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): Strong alkalis.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Strong alkalis.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of nitrogen, and smoke.

Section VI - Toxicological Properties

Threshold Limit Value: See Section II
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.
Routes of entry: Skin contact or absorbtion, eye contact, inhalation, ingestion.
Effects of Overexposure: To vapor, spray mist, liquid.
Acute: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation; severe irritation, redness, and tearing of the eyes, blurred vision sensation of seeing halos around lights; extraction of natural oils with resultant dry skin, irritation, and dermatitis; gastrointestinal irritation, nausea, vomiting and diarrhea, corosive to skin and eyes.
Chronic: Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in an anemic condition.
Cancer Risks: No ingredients in these products are known to NTP, IARC or OSHA to be carcinogenic.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Refer to protective measures listed in Sections IV, V, VI, VIII, or IX. Remove all sources of ignition. Avoid breathing vapors, ventilate area, remove with inert absorbent using non-sparking tools.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. Rags, filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated products are hazardous before disposal and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved airline respirator or hood. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment. See safety equipment supplier for evaluation and recommendation. Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.
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 contact. Liquid may penetrate shoes and leather causing delayed irritation.
Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.
Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes 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 container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum. Items such as rags, filters, paint suits, etc., may be hazardous waste and if so must be disposed of as cited in Section VII.

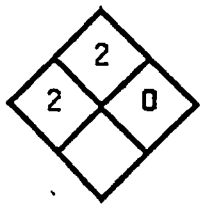
Section VIII - First Aid Measures

Emergency and First Aid Procedures: Inhalation - move to fresh air, give artificial respiration if necessary; skin contact - wash with soap and water, not solvent; 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 a physician or poison control center immediately. Treat symptomatically
Medical Conditions Prone to Aggravation: none expected

Section IX - Preparation Information

Prepared by Akzo Coatings Car Refinish Technical Department, April 1993.
Phone: 404-662-8464
Reference sources used in addition to raw material supplier MSDS information:
American Conference of Governmental Industrial Hygienists, *1992-1993 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1992.
Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Second Edition, Van Nostrand Reinhold, New York, 1991.
U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.
DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. REGULATIONS REQUIRE THAT ALL EMPLOYEES BE TRAINED ON MATERIAL SAFETY DATA SHEETS FOR ALL PRODUCTS WITH WHICH THEY COME IN CONTACT.

NFPA 704



While Akzo Coatings Inc. believes that the data contained herein are accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which Akzo Coatings Inc. assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

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
[illegible]OXYETHYL ACETATE [illegible]TYL 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

[illegible]T VOLATILE BY VOLUME:
100.0

WEIGHT PER GALLON:
7.73 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

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

MATERIAL SAFETY DATA SHEET

12-30-912-C

Modified Rail Black

Date of Preparation: April, 1994

Section I - Product Information

Manufacturer: Akzo Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Product Class: Alkyd Paint
Packing Group: III

Product Code: 2083

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332
Transport Class: UN1263
Shipping Name: Paint

Section II - Hazardous Ingredients

Hazardous Ingredient	Percent weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal	LEL
Xylene *(SARA 313)*	50.1%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5
Carbon Black	1-5%	1333-86-4	n. ap.	3.5mg/m^3	3.5mg/m^3	n. av.	n. av.	n. av.	n.ap
Ethyl-3-Ethoxypropionate	1-5%	763-69-9	1.1	n. av.	n. av.	5000	18880	1000	n.ap
Ethylbenzene*(SARA313)*	6.7%	100-41-4	10.0	100ppm	100ppm	3500	5000	4000	1.0
Butyl Acetate	5-20%	123-86-4	8.0	150ppm	150ppm	1400	n.av.	2000	1.7

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a (*P65*) this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 260-329F
Weight per Gallon: 7.9
Percent Volatile by Volume: 71%
Volatile Organic Compounds: 4.2 lbs/gal

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 45F
Lower Explosive Limit: 1.0
NFPA FLammability: I B
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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): Oxidizers, alkali metals, hydrogen fluoride, nitric acid, sodium hydroxide.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Heat, open flame, sparks.
Hazardous Combustion Products: Oxides of carbon and nitrogen, various hydrocarbons, fumes.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in this product are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. See safety equipment supplier for evaluation and recommendation.

In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.
Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.
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 contact. Liquid may penetrate shoes and leather causing delayed irritation.
Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.
Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Store plastic containers of flammable liquids inside closed, approved boxes or safety cabinets. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.
Other Precautions: Use approved bonding and grounding procedures. Observe label precautions. Keep closures tight and container upright to prevent leakage. Never use pressure to empty container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

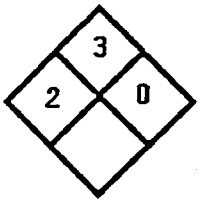
Section VIII - First Aid Measures

Emergency and First Aid Procedures:
Inhalation - move to fresh air, give artificial respiration if necessary.
Skin contact - wash with soap and water, not solvent;
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 a physician or poison control center immediately. Treat symptomatically
Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders

Section IX - Preparation Information

Prepared by Akzo Coatings Car Refinish Technical Department.
Phone: 404-662-8464
Reference sources used in addition to raw material supplier MSDS information:
American Conference of Governmental Industrial Hygienists, *1992-1993 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1992.
Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Second Edition, Van Nostrand Reinhold, New York, 1991.
U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.
DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. REGULATIONS REQUIRE THAT ALL EMPLOYEES BE TRAINED ON MATERIAL SAFETY DATA SHEETS FOR ALL PRODUCTS WITH WHICH THEY COME IN CONTACT.

NFPA 704



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MATERIAL SAFETY DATA SHEET

FLNA4006M

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Product Code: FLNA4006

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332
Packing Group: III
Transport Class: UN1263

Shipping Name: Paint
Product Class: Acrylic Paint

Section II - Hazardous Ingredients

Hazardous Ingredient	Percent weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal	LEL
Xylene *(SARA 313)*	11.3%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5
Butyl Acetate	6.1%	123-86-4	8.0	150ppm	150ppm	1400	n.av.	2000	1.7
Isobutyl Acetate	4.2%	110-19-0	12.5	150ppm	150ppm	5200	17400	3500	2.4
Aromatic Naphtha 100	8.6%	64742-95-6	3.0	50ppm	500ppm	4700	n. av.	3670	0.9
Aromatic Naphtha 150	3.0%	64742-94-5	5.0	50ppm	500ppm	n.av.	n.av.	n.av.	1.0
Amorphous Silica	3.4%	112926-00-8	n.ap	$10mg/m^3$	$6mg/m^3$	3160	n.av.	n.av.	n.ap
Dipentene	1.1%	138-86-3	1.3	n.av.	n.av.	5000	n.av.	n.av.	0.7
Titanium Dioxide	30.7%	13463-67-7	n.ap	$10mg/m^3$	$10mg/m^3$	n.av.	n.av.	n.av.	n.ap

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a *(P65)* this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 177-380F
Weight per Gallon: 10.8
Percent Volatile by Volume: 53%
Volatile Organic Compounds: 4.0

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 72F
Lower Explosive Limit: 0.7
NFPA Flammability: I B
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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): Oxidizers, alkali metals, hydrogen fluoride, nitric acid, sodium hydroxide.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Heat, open flame, sparks.
Hazardous Combustion Products: Oxides of carbon and nitrogen, various hydrocarbons, fumes.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients of this product are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied

respirator. This product is designed to be mixed with isocyanate containing hardeners. Use a positive pressure air supply respirator. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment. See safety equipment supplier for evaluation and recommendation.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.

Other Precautions: Use approved bonding and grounding procedures. Observe label precautions. Keep closures tight and container upright to prevent leakage. Never use pressure to empty container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders.

Section IX - Preparation Information

Prepared by Akzo Coatings Car Refinish Technical Department.

Phone: 404-662-8464

Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1992-1993 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1992.

Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Second Edition, Van Nostrand Reinhold, New York, 1991.

U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.

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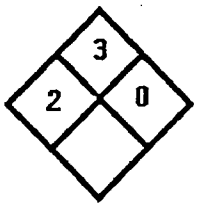
NFPA 704



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1230 9142

MATERIAL SAFETY DATA SHEET

Autocryl 1.2.3 Hardener

Date of Preparation: February 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Product Class: Isocyanate Hardener Product Code: 4052

Packing Group: III

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332
Transport Class: UN1263
Shipping Name: Paint Related Material

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
Xylene*(SARA313)*	20.1%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5
PropyleneGlycolMetEtherAcetate	6.2%	108-65-6	3.8	n. av.	n. av.	8532	5000	n. av.	1.5
N-butyl Acetate	32.8%	123-86-4	8.0	150ppm	150ppm	14000	n. av.	2000	1.7
Aliphatic Polyisocyanate Resin	36.9%	28182-81-2	n. ap.	0.5mg/m^3	n. av.	n. av.	n. av.	n. av.	n.ap
Ethylbenzene*(SARA313)*	3.4%	100-41-4	10.0	100ppm	100ppm	3500	5000	4000	1.0
HMDI Monomer *(SARA313)*	0.6%	822-06-6	n. ap.	.005mg/m^3	n. av.	710	570	n. av.	n.ap

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a (*P65*) this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Weight per Gallon: 8.1
Boiling Range: 168-420F
Percent Volatile by Volume: 68
Volatile Organic Compounds: 5.0 pounds/gallon or 600 grams/liter

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 81F
Lower Explosive Limit: 1.0
NFPA Flammability: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, oxidizers, alkali metals, water, amines, nitric acid, sodium hypochlorite, metal compounds.
Hazardous Polymerization: May occur.
Conditions to Avoid: Open flame, heat, sparks, moisture.
Hazardous Decomposition Products: Oxides of carbon and nitrogen, various hydrocarbons, hydrogen cyanide, hexamethylene diisocyanate (HDI).

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in this product are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. This product contains isocyanates. Use a positive pressure air supply respirator. See safety equipment supplier for evaluation and recommendation. In cases where no monitoring for

airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.

Other Precautions: Use approved bonding and grounding procedures. Observe label precautions. Keep closures tight and container upright to prevent leakage. Never use pressure to empty container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Isocyanate sensitization, skin disorders.

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628

Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.

Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.

U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.

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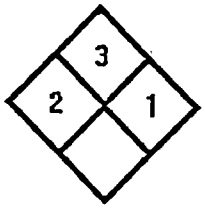
NFPA 704



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MATERIAL SAFETY DATA SHEET

1.2.3 Slow Reducer

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332

Product Class: Solvent Blend
Product Code: 5091
Packing Group: III

Transport Class: UN1263
Shipping Name: Paint Related Material

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
PropyleneGlycolMethylEtherAcetate	30.0%	108-65-6	3.8	n. av.	n. av.	8532	5000	n. av.	1.5
Propylene Glycol Methyl Ether	17.0%	107-98-2	12.5	100ppm	100ppm	6052	12000	n. av.	1.6
Aromatic Naphtha 100	7.6%	64742-95-6	3.0	50ppm	500ppm	4700	n. av.	3670	0.9
2-butoxy Ethyl Acetate*(SARA313)*	5.0%	112-07-2	0.5	n. av.	n. av.	2400	1500	n. av.	0.8
N-butyl Acetate	37.0%	123-86-4	8.0	150ppm	150ppm	14000	n. av.	2000	1.7
Diacetone Alcohol	3.4%	123-42-2	0.9	50ppm	50ppm	4000	13500	n. av.	1.8

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Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 248-367F
Weight per Gallon: 7.6
Percent Volatile by Volume: 100
Volatile Organic Compounds: 7.6 lbs/gal

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 83F
Lower Explosive Limit: 0.8
NFPA Flammability: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, oxidizers, alkali metals, water, amines, nitric acid, sodium hypochlorite, metal compounds.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: High temperatures, flame, sparks.
Hazardous Decomposition Products: Oxides of carbon, toxic fumes, various hydrocarbons.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in these products are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. In

cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment. See safety equipment supplier for evaluation and recommendation.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes 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 container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628

Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.

Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.

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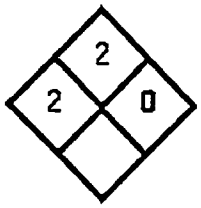
NFPA 704



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MATERIAL SAFETY DATA SHEET

1.2.3 Extra Slow Reducer

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332

Product Class: Solvent Blend
Product Code: 5097
Transport Class: UN1263
Packing Group: III
Shipping Name: Paint Related Material

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
PropyleneGlycolMethylEtherAcetate	34.0%	108-65-6	3.8	n. av.	n. av.	8532	5000	n. av.	1.5
Propylene Glycol Methyl Ether	15.0%	107-98-2	12.5	100ppm	100ppm	6052	12000	n. av.	1.6
Aromatic Solvent	6.9%	000	n. av.	100ppm	n. av.	n. av.	n. av.	n. av.	n. av.
2-butoxy Ethyl Acetate*(SARA313)*	10.3%	112-07-2	0.5	n. av.	n. av.	2400	1500	n. av.	0.8
N-butyl Acetate	27.0%	123-86-4	8.0	150ppm	150ppm	14000	n. av.	2000	1.7
Diacetone Alcohol	6.0%	123-42-2	0.9	50ppm	50ppm	4000	13500	n. av.	1.8

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a (*P65*) this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 262-366F (128-186C)
Weight per Gallon (specific gravity): 7.7 (0.92)
Percent Volatile by Volume: 100
Volatile Organic Compounds: 7.7 lbs/gal

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 91F
Lower Explosive Limit: 0.8
NFPA Flammability: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, oxidizers, alkali metals, amines, nitric acid, sodium hydroxide.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: High temperatures, flame, sparks.
Hazardous Decomposition Products: Oxides of carbon, aldehydes, fumes, various hydrocarbons.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in these products are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: (Acute) Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. (Chronic) Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: (Acute) Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. (Chronic) Skin sensitization may occur.
Eye contact: (Acute) Irritation, redness, pain, blurred vision, sensation of seeing halos around lights. (Chronic) Eye damage.
Ingestion: (Acute) Gastrointestinal irritation, nausea, vomiting and diarrhea. (Chronic) Kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied

respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment. See safety equipment supplier for evaluation and recommendation.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during heating.

Protective Gloves: Required for prolonged or repeated contact. Refer to safety equipment supplier for effective glove recommendations.

Eye Protection: Use safety goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes 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 container; drum is not a pressure vessel. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders

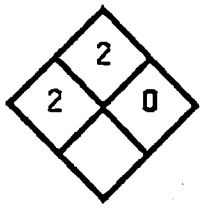
Section IX - Preparation Information

Prepared by Akzo Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628
Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.
Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.
U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.

DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. REGULATIONS REQUIRE THAT ALL EMPLOYEES BE TRAINED ON MATERIAL SAFETY DATA SHEETS FOR ALL PRODUCTS WITH WHICH THEY COME IN CONTACT.

NFPA 704



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MATERIAL SAFETY DATA SHEET

1.2.3 Retarder

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Product Class: Solvent Blend
Packing Group: III

Emergency Telephone:
Chemtrec: 800-424-9300
Product Code: 5028
Transport Class: UN1263
Shipping Name: Paint Related Material

Section II - Hazardous Ingredients

Hazardous Ingredient	Percent weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
Diacetone Alcohol	5.0%	123-42-2	0.9	50ppm	50ppm	4000	13500	n.av.	1.8
PM Acetate	40.0%	108-65-6	3.8	n.av.	n.av.	8532	5000	n.av.	1.5
Butyl Acetate	20.0%	123-86-4	8.0	150ppm	150ppm	1400	n.av.	2000	1.7
Aromatic Naphtha Heavy	7.6%	64742-94-5	1.0	50ppm	500ppm	n.av.	n.av.	n.av.	1.0
2-Butoxyethyl Acetate*(SARA 313)*	27.4%	112-07-2	0.5	n.av.	n.av.	2400	1500	n.av.	0.8

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a (*P65*) this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 260-380F
Weight per Gallon: 7.8
Percent Volatile by Volume: 100
Volatile Organic Compounds: 7.8 lbs/gal

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 105F
Lower Explosive Limit: 0.8
NFPA Flammability: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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): Strong alkalis.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Strong alkalis.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of nitrogen, and smoke.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in these products are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. In

cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment. See safety equipment supplier for evaluation and recommendation.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes 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 container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary; skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders

Section IX - Preparation Information

Prepared by Akzo Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628

Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.

Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.

U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.

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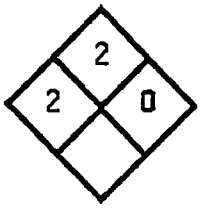
NFPA 704



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Print Key Output

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User . . . . . : INDENG1

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*                                  Indented                            15:16:19
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*   Formula/Drawing Number                                 On Hand-          .00
*   Revision:  1    Cls AA Lead Time                      Quantity  Date    Date
* Level  Component                                        Required  Effec.  Disc
* 1      12309233       PAINT REF. PRIME RED OXIDE                   110791 99999
* 1      12309076       PRIMER,RED OXIDE #1006 S-15-84      .55000   110791 99999
* 1      12309134       HARDNER #C25/41                     .28000   110791 99999
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* ROLL  CMD/1-Exit  CMD/2-Prior  CMD/3-Fold  CMD/4-All/Effective  CMD/5-Restart
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6.16 VOC

12-30-907-8

MATERIAL SAFETY DATA SHEET

Washprimer S15/84 Red

Date of Preparation: May, 1994

Section I - Product Information

Manufacturer: Akzo Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Product Code: 1006

Shipping Name: Paint
Transport Class: UN1263
Packing Group: III

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332
Product Class: Primers/Fillers

Section II - Hazardous Ingredients

Hazardous Ingredient	Percent weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
Xylene *(SARA 313)*	2.8%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5
Talc	6.3%	14807-96-6	n.ap	2mg/m^3	2mg/m^3	n.av.	n.av.	n.av.	n.ap
Methyl Isobutyl Ketone*(SARA 313)*	30.7%	108-10-1	16.0	50ppm	50ppm	1600	n.av.	2000	1.2
Ethanol	15.9%	64-17-5	44.0	1000ppm	1000ppm	7060	20000	20000	3.3
Isopropanol	13.5%	67-63-0	32.4	400ppm	400ppm	5840	13000	12000	2.0
N-Butanol*(SARA 313)*	1.7%	71-36-3	4.4	50ppm	50ppm	790	3400	8000	1.4
Zinc Chromate*(SARA 313)(P65)*	2.1%	13530-65-9	n.ap	.01mg/m^3	.01mg/m^3	n.av.	n.av.	n.av.	n.ap
Lead Titanate*(SARA 313)(P65)*	1.6%	12060-00-3	n.ap	.15mg/m^3	.05mg/m^3	n.av.	n.av.	n.av.	n.ap
Strontium Chromate*(SARA 313)(P65)*	1.9%	7789-06-2	n.ap	.0005mg/m^3	.5mg/m^3	3118	n.av.	n.av.	n.ap

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a *(P65)* this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 171-284F
Weight per Gallon: 8.4
Percent Volatile by Volume: 83
Volatile Organic Compounds: 5.3 lbs/gal

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 54F
NFPA Flammability: I B
Lower Explosion Limit: 1.0
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, acids, oxidizers, water, alkali metals, halogenated solvents, nitric acid, halogen compounds, sodium hydroxide, hydrogen peroxide.
Hazardous Polymerization: May occur.
Conditions to Avoid: High temperatures, flame, sparks high humidity, moisture.
Hazardous Decomposition Products: Oxides of carbon and nitrogen, fumes, various hydrocarbons, toxic fumes, aldehydes, butyraldehyde, acroleins, crotonal, formaldehyde, acids, butyric acid, hydrogen gas.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: Hexavalent chromium from chromate compounds is listed by ACGIH as a confirmed human carcinogen (A1), NTP as a known carcinogen and IARC as being carcinogenic to humans (group 1). Lead from lead compounds is listed by ACGIH as a suspected human carcinogen (A2), and by IARC as possibly being carcinogenic to humans (group 1).
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc.,

contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.

Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. This primer contains lead. Use NIOSH/MSHA approved respirator with HEPA Dust Cartridges for concentrations below 0.05mg/m^3 as Pb. For concentrations above 0.05 mg/m^3 as Pb, use air supplied respirator. See OSHA Standard 29 CFR Section 1910.1025. See safety equipment supplier for evaluation and recommendation. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes 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 container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders, neurological disorders.

Section IX - Preparation Information

Prepared by Akzo Coatings Car Refinish Technical Department.

Phone: 404-662-8464

Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1992-1993 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1992.

Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Second Edition, Van Nostrand Reinhold, New York, 1991.

U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.

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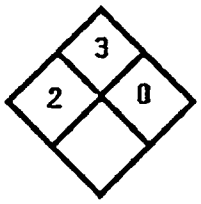
NFPA 704



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12309134

MATERIAL SAFETY DATA SHEET

C25/41

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332

Product Class: Acid Solution
Transport Class: UN1263

Shipping Name: Paint Related Material

Product Code: 4022
Packing Group: II

Section II - Hazardous Ingredients

Hazardous Ingredient	Percent weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
N-butyl Alcohol*(SARA313)*	14.7%	71-36-3	4.4	50ppm	50ppm	790	3400	8000	1.4
Phosphoric Acid *(SARA 313)*	4.3%	7664-38-2	n.ap	$1mg/m^3$	$1mg/m^3$	1530	2740	n.av.	n.ap
N-butyl Acetate	15.6%	123-86-4	8.0	150ppm	150ppm	14000	n. av.	2000	1.7
Ethyl Alcohol	12.7%	64-17-5	44.0	1000ppm	1000ppm	7060	20000	20000	3.3
Ethylbenzene*(SARA313)*	3.7%	100-41-4	10.0	100ppm	100ppm	3500	5000	4000	1.0
Methyl Isobutyl Ketone*(SARA313)*	15.9%	108-10-1	16.0	50ppm	50ppm	1600	n. av.	2000	1.2
Toluene*(SARA313)(P65)*	14.7%	108-88-3	22.0	50ppm	100ppm	5000	14000	4000	1.2
Xylene*(SARA313)*	15.9%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a *(P65)* this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 171-284F
Weight per Gallon: 7.2
Percent Volatile by Volume: 98
Volatile Organic Compounds: 6.8 lbs/gal

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 45F
Lower Explosive Limit: 1.0
NFPA Flammability: I B
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, acids, oxidizers, water, alkali metals, halogenated solvents.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Heat, flame, sparks.
Hazardous Decomposition Products: Oxides of carbon, toxic fumes, various hydrocarbons, oxides of phosphorous.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in these products are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects: Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.

Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment. See safety equipment supplier for evaluation and recommendation.
Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.
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 contact. Liquid may penetrate shoes and leather causing delayed irritation.
Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.
Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes 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 container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

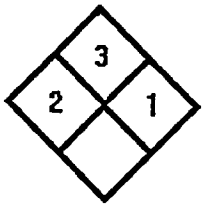
Section VIII - First Aid Measures

Emergency and First Aid Procedures:
Inhalation - move to fresh air, give artificial respiration if necessary.
Skin contact - wash with soap and water, not solvent;
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 a physician or poison control center immediately. Treat symptomatically
Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders.

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628
Reference sources used in addition to raw material supplier MSDS information:
American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.
Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.
U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.
DO NOT HANDLE UNTIL THE MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. REGULATIONS REQUIRE THAT ALL EMPLOYEES BE TRAINED ON MATERIAL SAFETY DATA SHEETS FOR ALL PRODUCTS WITH WHICH THEY COME IN CONTACT.

NFPA 704



While Akzo Nobel Coatings Inc. believes that the data contained herein are accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which Akzo Nobel Coatings Inc. assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

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                    Print Key Output                                          Page   1
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User  . . . . . . . . . . :  INDENG1

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*   Formula/Drawing Number                                 On Hand-          .00
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* Level  Component                                        Required  Effec.  Disc
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* 1      12309613       TOP COAT,CHROMATIC BLACK #2085      .64000     020794 99999
* 1      12309142       HARDNER #4052-1.2.3.                .16000     020794 99999
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* ROLL  CMD/1-Exit  CMD/2-Prior  CMD/3-Fold  CMD/4-All/Effective  CMD/5-Restart
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12-30-961-3

MATERIAL SAFETY DATA SHEET

Meta-Flex Plus Black

Date of Preparation: April, 1994

Section I - Product Information

Manufacturer: Akzo Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092
Product Class: Alkyd Coating
Packing Group: III

Shipping Name: Paint

Emergency Telephone:
Chemtrec: 800-424-9300
Product Codes: 2085
Transport Class: UN1263
Poisindex: 303-832-3332

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
Xylene*(SARA313)*	47.5%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5
Carbon Black	2.5%	1333-86-4	n. ap.	3.5mg/m^3	3.5mg/m^3	n. av.	n. av.	n. av.	n.ap
Aromatic Naphtha 100	2.2%	64742-95-6	3.0	50ppm	500ppm	4700	n. av.	3670	0.9
PropyleneGlycolMethylEtherAcetate	2.2%	108-65-6	3.8	n. av.	n. av.	8532	5000	n. av.	1.5

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a (*P65*) this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 208-384F
Weight per Gallon: 8.0
Percent Volatile by Volume: 59
Volatile Organic Compounds: 4.3 lbs/gal

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 78F
Lower Explosive Limit: 0.9
NFPA Flammability: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Acids, oxidizers, amines, aldehydes,halogenated solvents, nitric acid, halogen compounds, hydrogen fluoride. phosphorous compounds, akylene oxides, ammonia.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Heat, flame, sparks.
Hazardous Decomposition Products: Oxides of carbon, various hydrocarbons.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients of these products is known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved airline respirator or hood. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. See safety equipment supplier for evaluation and recommendation. In

cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.
Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.
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 contact. Liquid may penetrate shoes and leather causing delayed irritation.
Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.
Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Store plastic containers of flammable liquids inside closed, approved boxes or safety cabinets. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.
Other Precautions: Use approved bonding and grounding procedures. Observe label precautions. Keep closures tight and container upright to prevent leakage. Never use pressure to empty container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:
Inhalation - move to fresh air, give artificial respiration if necessary.
Skin contact - wash with soap and water, not solvent;
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 a physician or poison control center immediately. Treat symptomatically
Medical Conditions Prone to Aggravation: Pulmonary disorders.

Section IX - Preparation Information

Prepared by Akzo Coatings Car Refinish Technical Department.
Phone: 404-662-8464
Reference sources used in addition to raw material supplier MSDS information:
American Conference of Governmental Industrial Hygienists, *1992-1993 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1992.
Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Second Edition, Van Nostrand Reinhold, New York, 1991.
U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.
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While Akzo Coatings Inc. believes that the data contained herein are accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which Akzo Coatings Inc. assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

1230 9142

MATERIAL SAFETY DATA SHEET

Autocryl 1.2.3 Hardener

Date of Preparation: February 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Product Class: Isocyanate Hardener Product Code: 4052

Packing Group: III

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332
Transport Class: UN1263
Shipping Name: Paint Related Material

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
Xylene*(SARA313)*	20.1%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5
PropyleneGlycolMetEtherAcetate	6.2%	108-65-6	3.8	n. av.	n. av.	8532	5000	n. av.	1.5
N-butyl Acetate	32.8%	123-86-4	8.0	150ppm	150ppm	14000	n. av.	2000	1.7
Aliphatic Polyisocyanate Resin	36.9%	28182-81-2	n. ap.	0.5mg/m^3	n. av.	n. av.	n. av.	n. av.	n.ap
Ethylbenzene*(SARA313)*	3.4%	100-41-4	10.0	100ppm	100ppm	3500	5000	4000	1.0
HMDI Monomer *(SARA313)*	0.6%	822-06-6	n. ap.	.005mg/m^3	n. av.	710	570	n. av.	n.ap

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a *(P65)* this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Weight per Gallon: 8.1
Boiling Range: 168-420F
Percent Volatile by Volume: 68
Volatile Organic Compounds: 5.0 pounds/gallon or 600 grams/liter

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 81F
Lower Explosive Limit: 1.0
NFPA Flammability: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, oxidizers, alkali metals, water, amines, nitric acid, sodium hypochlorite, metal compounds.
Hazardous Polymerization: May occur.
Conditions to Avoid: Open flame, heat, sparks, moisture.
Hazardous Decomposition Products: Oxides of carbon and nitrogen, various hydrocarbons, hydrogen cyanide, hexamethylene diisocyanate (HDI).

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in this product are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. This product contains isocyanates. Use a positive pressure air supply respirator. See safety equipment supplier for evaluation and recommendation. In cases where no monitoring for

airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.
Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.
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 contact. Liquid may penetrate shoes and leather causing delayed irritation.
Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.
Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.
Other Precautions: Use approved bonding and grounding procedures. Observe label precautions. Keep closures tight and container upright to prevent leakage. Never use pressure to empty container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:
Inhalation - move to fresh air, give artificial respiration if necessary.
Skin contact - wash with soap and water, not solvent;
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 a physician or poison control center immediately. Treat symptomatically
Medical Conditions Prone to Aggravation: Isocyanate sensitization, skin disorders.

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628
Reference sources used in addition to raw material supplier MSDS information:
American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.
Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.
U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.
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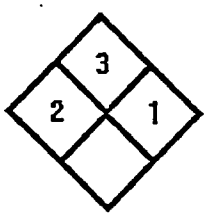
NFPA 704



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5763SS1 V3ROM5 940604 S1036680 08/23/95 15:15:58

Display Device . . . . . : LWSM01
User . . . . . : INDENG1

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*   Formula/Drawing Number                                 On Hand-          .00
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* Level  Component                                        Required  Effec.  Disc
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* 1      12309738       PRIMER GREY LV #1065                .60000    050694 99999
* 1      12309746       HARDNER LV #4095                    .20000    050694 99999
* 1      12309753       LV PRIME REDUCER #6083              .20000    050694 99999
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(3.74)

1230 9738

MATERIAL SAFETY DATA SHEET

Autocoat LV Epoxy

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Emergency Telephone:
Chemtrec: 800-424-93
Poisindex: 303-832-3332

Product Class: Primers/Fillers
Packing Group: III
Shipping Name: Paint
Product Code: 1065
Transport Class: UN1263

Section II - Hazardous Ingredients

Hazardous Ingredient	Percent weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
Xylene *(SARA 313)*	2.0%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5
Talc	2.5%	14807-96-6	n.ap	$2mg/m^3$	$2mg/m^3$	n.av.	n.av.	n.av.	n.ap
Zinc Phosphate*(SARA 313)*	24.4%	7790-90-0	n.ap	n.av.	n.av.	n.av.	n.av.	n.av.	n.ap
2-Butoxyethyl Acetate*(SARA 313)*	1.5%	112-07-2	0.5	n.av.	n.av.	2400	1500	n.av.	0.8
Titanium Dioxide	9.8%	13463-67-7	n.ap	$10mg/m^3$	$10mg/m^3$	n.av.	n.av.	n.av.	n.ap
Methyl Ethyl Ketone *(SARA 313)*	4.8%	78-93-3	77.5	200ppm	200ppm	2737	13000	9610	1.1
Stoddard Solvent	2.7%	8052-41-3	2.0	100ppm	100ppm	n.av.	n.av.	n.av.	1.0
Calcium Silicate	22.4%	13983-17-0	n.ap	$10mg/m^3$	n.av.	n.av.	n.av.	n.av.	n.ap
Butyl Glycidyl Ether	4.2%	2426-08-6	n.ap	25ppm	50ppm	n.av.	n.av.	n.av.	n.ap
Acetic Acid Ester Oxo Alcohol	3.6%	90438-79-2	22.0	n.av.	n.av.	n.av.	n.av.	n.av.	1.0

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a (*P65*) this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 175-382F
Weight per Gallon: 14.3
Percent Volatile by Volume: 34
Volatile Organic Compounds (minus water): 2.28 pounds/gallon or 274 grams/liter. At standard mixing ratio 100:30:30 with LV Epoxy Hardener and LV Epoxy Reducer VOC is 3.42 pounds/gallon or 411 grams/liter.

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 16F
NFPA Flammability: I B
Lower Explosive Limit: 1.0
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, acids, oxidizers, water, alkali metals, halogenated solvents, nitric acid, halogen compounds, sodium hydroxide, hydrogen fluoride.
Hazardous Polymerization: May occur.
Conditions to Avoid: High temperatures, flame, sparks high humidity, moisture.
Hazardous Decomposition Products: Oxides of carbon and nitrogen, fumes, various hydrocarbons, hydrogen gas.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in this product are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc.,

contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.

Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. See safety equipment supplier for evaluation and recommendation. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Store plastic containers of flammable liquids inside closed, approved boxes or safety cabinets. Close all containers after each use. Consult NFPA and local codes 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 container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders.

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department..

Phone: 404-662-8464

Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.

Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.

U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.

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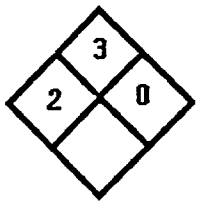
NFPA 704



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1230 9746

MATERIAL SAFETY DATA SHEET

Autocoat LV Hardener Epoxy

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332

Product Class: Non-Isocyanate Hardener
Product Code: 4095
Packing Group: III

Transport Class: UN1263
Shipping Name: Paint Related Material

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
Xylene*(SARA313)*	4.3%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5
Ethylbenzene*(SARA313)*	1.0%	100-41-4	10.0	100ppm	100ppm	3500	5000	4000	1.0
N-butyl Alcohol*(SARA313)*	43.4%	71-36-3	4.4	50ppm	50ppm	790	3400	8000	1.4
Polyamine	10.5%	000	n. ap.	n. av.	n. av.	n. av.	n. av.	n. av.	n.ap

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a (*P65*) this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Weight per Gallon: 7.5
Boiling Range: 243-284F
Percent Volatile by Volume: 54
Appearance and Odor: Clear liquid with organic solvent odor
Volatile Organic Compounds (minus water): 3.65 lbs./gallon
438 grams/liter

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 55F
Lower Explosive Limit: 1.0
NFPA Flammability: I B
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, oxidizers, alkali metals, water, amines, nitric acid, sodium hypochlorite, metal compounds.
Hazardous Polymerization: May occur.
Conditions to Avoid: Open flame, heat, sparks, moisture.
Hazardous Decomposition Products: Oxides of carbon and nitrogen, various hydrocarbons, hydrogen cyanide.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in this product are known to NTP, IARC, ACGIH, or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. In cases where no monitoring for airborne contaminants has been

carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.
Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.
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 contact. Liquid may penetrate shoes and leather causing delayed irritation.
Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.
Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.
Other Precautions: Use approved bonding and grounding procedures. Observe label precautions. Keep closures tight and container upright to prevent leakage. Never use pressure to empty container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:
Inhalation - move to fresh air, give artificial respiration if necessary.
Skin contact - wash with soap and water, not solvent;
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 a physician or poison control center immediately. Treat symptomatically
Medical Conditions Prone to Aggravation: Isocyanate sensitization, skin disorders, pulmonary disorders.

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628
Reference sources used in addition to raw material supplier MSDS information:
American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.
Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.
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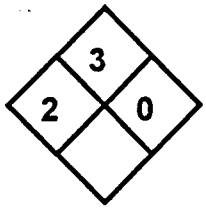
NFPA 704



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1230925 3

MATERIAL SAFETY DATA SHEETS

Autocoat LV Epoxy Reducer

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092
Transport Class: UN1263
Product Class: Solvent Blend
Shipping Name: Paint Related Material

Emergency Telephone:
Chemtrec: (800) 424-9300
Poisindex: 303-8323332
Packing Group: II
Product Code: 6083

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LD_{50} Inhal
Aromatic Naphtha 100	5.2%	64742-95-6	3.0	50ppm	500ppm	4700	n.av.	3670
Methyl Ethyl Ketone *(SARA 313)*	35.9%	78-93-3	70.0	200ppm	200ppm	2737	13000	9610
Methyl Isobutyl Ketone *(SARA 313)*	22.8%	108-10-1	16.0	50ppm	50ppm	1600	n.av.	2000
Butyl Acetate	23.6%	123-86-4	8.0	150ppm	150ppm	14000	n.av.	2000
2-Butoxyethyl Acetate *(SARA 313)*	12.6%	112-07-2	0.3	n.av.	n.av.	2400	1500	n.av.

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a *(P65)* this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 175-367F
Weight per Gallon: 7.0
Percent Volatile by Volume: 100
Volatile Organic Compounds (minus water): 7.00 pounds/gallon or 840 grams/liter

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 16F
Lower Explosive Limit: 0.8
NFPA Flammability: I B
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, oxidizers, alkali metals, water, amines, nitric acid, sodium hypochlorite, metal compounds.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: High temperatures, flame, sparks.
Hazardous Decomposition Products: Oxides of carbon, toxic fumes, various hydrocarbons.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in these products are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste.

Determine whether contaminated items are hazardous and dispose of as appropriate.

Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment. See safety equipment supplier for evaluation and recommendation.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes 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 container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.

Phone: 404-441-8628

Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.

Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.

U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.

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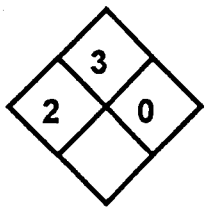
NFPA 704



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*   Formula/Drawing Number                                  On Hand-          .00
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* Level  Component                                         Required  Effec.  Disc
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* 1      12309142        HARDNER #4052-1.2.3.                .16000   092393 99999
* 1      12309183        TOP COAT, RED ENAMEL #2292          .64000   092393 99999
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* ROLL  CMD/1-Exit  CMD/2-Prior  CMD/3-Fold  CMD/4-All/Effective  CMD/5-Restart
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1230 918 3

MATERIAL SAFETY DATA SHEET

Metaflex Red Enamel

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Product Class: Alkyd Paint
Product Code: 2292
Packing Group: III

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332
Transport Class: UN1263
Shipping Name: Paint

Section II - Hazardous Ingredients

Hazardous Ingredient	Percent weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal	LEL
Xylene *(SARA 313)*	33.8%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000	1.5
Ethylbenzene*(SARA313)*	8.4%	100-41-4	10.0	100ppm	100ppm	3500	5000	4000	1.0
Diacetone Alcohol	1.9%	123-42-2	0.9	50ppm	50ppm	4000	13500	n. av.	1.8
PropyleneGlycolMethylEtherAcetate	2.4%	108-65-6	3.8	n. av.	n. av.	8532	5000	n. av.	1.5

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a *(P65)* this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 260-329F
Weight per Gallon: 8.0
Percent Volatile by Volume: 70%
Volatile Organic Compounds: 4.3 lbs/gal

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 45F
Lower Explosive Limit: 1.0
NFPA FLammability: I B
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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): Oxidizers, alkali metals, hydrogen fluoride, nitric acid, sodium hydroxide.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Heat, open flame, sparks.
Hazardous Combustion Products: Oxides of carbon and nitrogen, various hydrocarbons, fumes.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in this product are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. In confined areas use NIOSH/MSHA approved air supplied respirator. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. See safety equipment supplier for evaluation and recommendation. In cases where no monitoring for airborne contaminants has

been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.
Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.
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 contact. Liquid may penetrate shoes and leather causing delayed irritation.
Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.
Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Store plastic containers of flammable liquids inside closed, approved boxes or safety cabinets. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.
Other Precautions: Use approved bonding and grounding procedures. Observe label precautions. Keep closures tight and container upright to prevent leakage. Never use pressure to empty container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:
Inhalation - move to fresh air, give artificial respiration if necessary.
Skin contact - wash with soap and water, not solvent;
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 a physician or poison control center immediately. Treat symptomatically
Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628
Reference sources used in addition to raw material supplier MSDS information:
American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.
Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.
U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.
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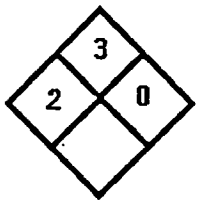
NFPA 704



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                    Print Key Output                                    Page   1
5763SS1 V3ROM5 940604                S1036680              08/23/95  15:17:11

Display Device  . . . . . :  LWSM01
User  . . . . . . . . . . :  INDENG1

 *...+... 1 ...+... 2 ...+... 3 ...+... 4 ...+... 5 ...+... 6 ...+... 7 ...+...
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*   BOM300                  Bill of Materials Inquiry                  8/23/95
*                                  Indented                           15:17:08
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*   Formula/Drawing Number                                 On Hand-          .00
*   Revision:  1    Cls GB Lead Time                      Quantity  Date    Date
* Level  Component                                        Required  Effec.  Disc
* 1      12309811       PAINT REF AUTOCOAT LV WHITE                  060994 99999
* 1      12309829       TOP COAT AUTOCOAT LV WHITE5125      .55000   060994 99999
* 1      12309696       HARDNER LV TOPCOAT #4099            .28000   060994 99999
* 1      12309704       LV TOPCOAT REDUCER #5052            .17000   060994 99999
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* ROLL  CMD/1-Exit  CMD/2-Prior  CMD/3-Fold  CMD/4-All/Effective  CMD/5-Restart
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12309829

MATERIAL SAFETY DATA SHEET

ELNA4006LV

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092
Product Class: Acrylic Coating
Transport Code: UN1263

Emergency Telephone:
Chemtrec: (800) 424-9300
Poisindex: 303-832-3332
Product Code: 5125
Shipping Name: Paint

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LD_{50} Inhal
Aromatic Naphtha 150	2.2%	64742-94-5	5.0	50ppm	500ppm	n.av.	n.av.	n.av.
Butyl Acetate	11.6%	123-86-4	8.0	150ppm	150ppm	14000	n.av.	2000
Ethyl Amyl Ketone	2.5%	541-85-5	<1.0	25ppm	25ppm	3500	n.av.	n.av.
Methyl Amyl Ketone	2.5%	110-43-0	2.1	50ppm	100ppm	1600	10000	2000
Titanium Dioxide	44.1%	13463-67-7	NA	$10mg/m^3$	$10mg/m^3$	n.av.	n.av.	n.av.
Amorphous Silica	4.8%	112926-00-8	NA	$10mg/m^3$	$6mg/m^3$	3160	n.av.	n.av.
V M & P Naphtha	2.2%	8032-32-4	38.0	300ppm	300ppm	n.av.	n.av.	1600
Xylene *(SARA 313)*	1.4%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a *(P65)* this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 200-380F (93-193C)
Percent Volatile by Volume: 41%
Weight per Gallon: 12.8
Volatile Organic Compounds: 2.95 pounds per gallon. When mixed as per instruction VOC of ready-to-spray product is 3.4 pounds per gallon.

Section - IV - Fire and Explosion Hazard Data

Flash Point (SFCC): 79F (26C)
Lower Explosive Limit: 0.9
NFPA Class: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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): Oxidizers, alkali metals, hydrogen fluoride, nitric acid, sodium hydroxide.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Heat, open flame, sparks.
Hazardous Combustion Products: Oxides of carbon and nitrogen, various hydrocarbons, fumes.

Section VI - Toxicological Propertie

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients used in these products are known to IARC, NTP, ACGIH or OSHA to be carcinogenic
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.

Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. This product is designed to be mixed with isocyanate containing hardeners. Use a positive pressure air supply respirator. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment. See safety equipment supplier for evaluation and recommendation.
Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.
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 contact. Liquid may penetrate shoes and leather causing delayed irritation.
Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.
Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.
Other Precautions: Use approved bonding and grounding procedures. Observe label precautions. Keep closures tight and container upright to prevent leakage. Never use pressure to empty container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:
Inhalation - move to fresh air, give artificial respiration if necessary.
Skin contact - wash with soap and water, not solvent;
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 a physician or poison control center immediately. Treat symptomatically
Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders.

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628
Reference sources used in addition to raw material supplier MSDS information:
American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.
Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.
U.S. Department of Health and Human Services, Centers for Disease Control, *NIOSH Pocket Guide to Chemical Hazards*, NIOSH, Cincinnati, OH, 1990.
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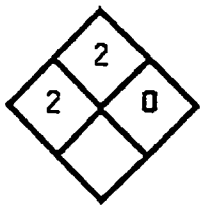
NFPA 704



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1230969 6

MATERIAL SAFETY DATA SHEET

Autocoat LV Hardener Slow

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092

Product Class: Isocyanate Hardener
Packing Group: III

Product Code: 4099

Emergency Telephone:
Chemtrec: 800-424-9300
Poisindex: 303-832-3332
Transport Class: UN1263
Shipping Name: Paint Related Material

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LC_{50} Inhal.	LEL
N-butyl Acetate	3.9%	123-86-4	8.0	150ppm	150ppm	14000	n. av.	2000	1.7
Aliphatic Polyisocyanate Resin	69.1%	28182-81-2	n. ap.	0.5mg/m^3	n. av.	n. av.	n. av.	n. av.	n.ap
HMDI Monomer *(SARA313)*	<0.2%	822-06-6	n. ap.	.005mg/m^3	na	710	570	n. av.	n.ap
Aromatic Naphtha 100	3.9%	64742-95-6	3.0	50ppm	500ppm	4700	n. av.	3670	0.9
Ethyl Amyl Ketone	7.7%	541-85-5	2.1	25ppm	25ppm	3500	n. av.	n. av.	n.ap
Methyl Amyl Ketone	15.3%	110-43-0	2.1	50ppm	100ppm	1600	10000	2000	1.1

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a *(P65)* this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Weight per Gallon: 8.6
Boiling Range: 260-344F
Percent Volatile by Volume: 38.4
Volatile Organic Compounds (minus water): 2.65 pounds/gallon or 318 grams/liter

Section IV - Fire or Explosion Hazard

Flash Point (SFCC): 99F
Lower Explosive Limit: 0.9
NFPA Flammability: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Alkalis, oxidizers, alkali metals, water, amines, nitric acid, sodium hypochlorite, metal compounds.
Hazardous Polymerization: May occur.
Conditions to Avoid: Open flame, heat, sparks, moisture.
Hazardous Decomposition Products: Oxides of carbon and nitrogen, various hydrocarbons, hydrogen cyanide, hexamethylene diisocyanate (HDI).

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients in this product are known to NTP, IARC, ACGIH or OSHA to be carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.
Respiratory Protection: Adequate ventilation is required. This product contains isocyanates. Use a positive pressure air supply respirator. See safety equipment supplier for evaluation and recommendation. In cases where no monitoring for

airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.

Other Precautions: Use approved bonding and grounding procedures. Observe label precautions. Keep closures tight and container upright to prevent leakage. Never use pressure to empty container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Isocyanate sensitization, skin disorders.

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.

Phone: 404-441-8628

Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.

Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.

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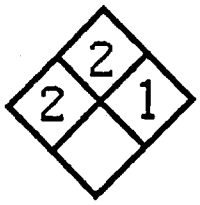
NFPA 704



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12309704

MATERIAL SAFETY DATA SHEETS

Autocoat LV Reducer

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092
Product Class: Solvent Blend
Shipping Name: Paint Related Material

Transport Class: UN1263

Emergency Telephone:
Chemtrec: (800) 424-9300
Poisindex: 303-832-3332
Product Code: 5052
Packing Group: III

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LD_{50} Inhal
Ethyl Amyl Ketone	50.0%	541-85-5	2.1	25ppm	25ppm	3500	n.av.	n.av.
Methyl Amyl Ketone	50.0%	110-43-0	2.1	50ppm	100ppm	1600	10000	2000

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a (*P65*) this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 300-324F (149-162C)
Percent Volatile by Volume: 100%
Weight per Gallon: 6.81 (specific gravity 0.82)
Volatile Organic Compounds (minus water): 6.81 pounds/gallon or 817 grams/liter.

Section - IV - Fire and Explosion Hazard Data

Flash Point (SFCC): 102F (39C)
Lower Explosive Limit: 1.1
NFPA Class: II
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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 under non-emergency conditions.
Incompatibility (materials to avoid): Oxidizers, alkali metals, aldehydes, nitric acid, sodium hydroxide.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Heat, flame, sparks.
Hazardous Decomposition Products: Oxides of carbon and nitrogen, various hydrocarbons, toxic fumes, aldehydes.

Section VI - Toxicological Properties

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients are known to NTP, IARC, ACGIH or OSHA as being carcinogenic.
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.

Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate.

Respiratory Protection: Adequate ventilation is required. This product is designed to be used with an isocyanate containing hardener. Use a positive pressure air supply respirator. See equipment supplier for recommendation. If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes 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 container; drum is not a pressure vessel. Avoid breathing sanding dust. Do not weld or flame cut on empty drum.

Section VIII - First Aid Measures

Emergency and First Aid Procedures:

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - wash with soap and water, not solvent;

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 a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders, eye disorders.

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.
Phone: 404-441-8628

Reference sources used in addition to raw material supplier MSDS information:

American Conference of Governmental Industrial Hygienists, *1993-1994 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*, ACGIH, Cincinnati, OH 1993.

Lewis, Richard J. Sr., *Hazardous Chemicals Desk Reference*, Third Edition, Van Nostrand Reinhold, New York, 1993.

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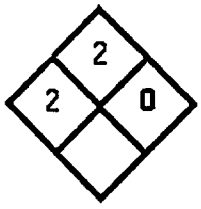
NFPA 704



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Print Key Output

Page 1

5763SS1 V3R0M5 940604 S1036680 08/23/95 15:16:55

Display Device . . . . . : LWSM01
User . . . . . : INDENG1

```
*...+... 1 ...+... 2 ...+... 3 ...+... 4 ...+... 5 ...+... 6 ...+... 7 ...+...
*****************************************************************************
*   BOM300                    Bill of Materials Inquiry                  8/23/95
*                                   Indented                            15:16:53
*   Parent 12309662           AUTOCOAT LV BLACK 242 SPRAYABL On Ord.-          .00
*   Formula/Drawing Number                                  On Hand-          .00
*   Revision:  1     Cls GB Lead Time                      Quantity  Date     Date
* Level  Component                                         Required  Effec.   Disc
* 1      12309670        PAINT REF AUTOCOAT LV BLACK                  050694 99999
* 1      12309688        TOP COAT AUTOCOAT LV BLK05242       .52632   050694 99999
* 1      12309696        HARDNER LV TOPCOAT #4099            .26316   050694 99999
* 1      12309704        LV TOPCOAT REDUCER #5052            .21052   050694 99999
*
*
*
*
*
*
*
*
*
*
* ROLL  CMD/1-Exit  CMD/2-Prior  CMD/3-Fold  CMD/4-All/Effective  CMD/5-Restart
*
*****************************************************************************
*...+... 1 ...+... 2 ...+... 3 ...+... 4 ...+... 5 ...+... 6 ...+... 7 ...+...
```

3.4

1230 9688

MATERIAL SAFETY DATA SHEET

Autocoat LV MM 242

Date of Preparation: January, 1995

Section I - Product Information

Manufacturer: Akzo Nobel Coatings Inc.
5555 Spalding Drive
Norcross, GA 30092
Product Class: Acrylic Coating
Transport Code: UN1263

Emergency Telephone:
Chemtrec: (800) 424-9300
Poisindex: 303-832-3332
Product Code: CO5242
Shipping Name: Paint

Section II - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press	ACGIH TLV	OSHA PEL	LD_{50} Oral	LD_{50} Derm	LD_{50} Inhal
Aromatic Naphtha 150	7.0%	64742-94-5	5.0	50ppm	500ppm	n.av.	n.av.	n.av.
Butyl Acetate	9.9%	123-86-4	8.0	150ppm	150ppm	14000	n.av.	2000
Ethyl Amyl Ketone	1.4%	541-85-5	<1.0	25ppm	25ppm	3500	n.av.	n.av.
Methyl Amyl Ketone	1.4%	110-43-0	2.1	50ppm	100ppm	1600	10000	2000
Carbon Black	3.9%	1333-86-4	NA	$3.5mg/m^3$	$3.5mg/m^3$	n.av.	n.av.	n.av.
V M & P Naphtha	7.1%	8032-32-4	38.0	300ppm	300ppm	n.av.	n.av.	1600
Xylene *(SARA 313)*	1.6%	1330-20-7	9.5	100ppm	100ppm	4300	14100	5000

If an ingredient is marked as *(SARA 313)*, it contains a chemical which is subject to the requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202. If an ingredient is marked with a *(P65)* this chemical is known to the state of California to cause cancer or reproductive toxicity.

Section III - Physical Data

Evaporation Rate: Slower than ether
Vapor Pressure: Heavier than air
Boiling Range: 200-380F (93-193C)
Percent Volatile by Volume: 42%
Weight per Gallon: 8.4
Volatile Organic Compounds: 2.64 pounds per gallon. When mixed as per instructions VOC is 3.2 pounds per gallon.

Section - IV - Fire and Explosion Hazard Data

Flash Point (SFCC): 79F (26C)
Lower Explosive Limit: 0.9
NFPA Class: I C
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, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Special Fire Fighting Procedures: 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): Oxidizers, alkali metals, hydrogen fluoride, nitric acid, sodium hydroxide.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Heat, open flame, sparks.
Hazardous Combustion Products: Oxides of carbon and nitrogen, various hydrocarbons, fumes.

Section VI - Toxicological Propertie

Threshold Limit Value: None established for this product. For further information, see Section II - Hazardous Ingredients
Cancer Risks: No ingredients used in these products are known to IARC, NTP, ACGIH or OSHA to be carcinogenic
Exposure Effects: Acute and Chronic
Inhalation: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, chemical pneumonitis, central nervous system depression and even asphyxiation. Delayed lung damage, kidney, liver, and cardiac disorders, red blood cell and leukocyte disorders which may result in anemia.
Skin contact: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis. Chronic sensitization to skin may occur.
Eye contact: Irritation, redness, pain, blurred vision, sensation of seeing halos around lights.
Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea; kidney damage, blood system damage.
Other Health Effects:
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section VII - Preventive Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Dike to reduce extent of spill. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.
Waste Disposal Method: Dispose of in accordance with federal, state and local pollution requirements. In addition, rags, spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste.

Determine whether contaminated items are hazardous and dispose of as appropriate.

Respiratory Protection: Adequate ventilation is required. This product is designed to be mixed with isocyanate containing hardeners. Use a positive pressure air supply respirator. In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use paint suit, goggles, gloves, and air supplied respiratory equipment. See safety equipment supplier for evaluation and recommendation.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during 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 goggles designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

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 contact. Liquid may penetrate shoes and leather causing delayed irritation.

Hygienic Practices: Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Precautions To Be Taken In Handling And Storing: Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.

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Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders.

Section IX - Preparation Information

Prepared by Akzo Nobel Coatings Car Refinish Manufacturing Operations Department.
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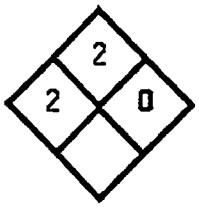
NFPA 704



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SEPT. 11 '95

Sh

PAINT V.0. C. COMPARISON

		PREVIOUS PAINT	LBS./GAL. SPRAYABLE V.O.C.	PRESENT PAINT	LBS./GAL. SPRAYABLE V.O.C.	CHANGE
SIDE ASSEMBLY	PRIME	S 15/84	6.2	1065 EPOXY	3.66	2.54
	BLACK	2083 RAIL BLK.	5.05	2085 METAFLEX	5.21	0.16
	RED	2292	5.05	2292 RED ENAMEL	5.22	0.17
PLATFORM	PRIME	S 15\84	6.29	S15\84	6.29	N.C.
	BLACK	2083 RAIL BLACK	5.05	2085 METAFLEX	5.21	0.16
UTILITY BODY	PRIME	S 15/84	6.29	1065 EPOXY	3.44	2.85
TOOL BOX	PRIME	S 15/84	6.29	S 15/84	6.2	N.C
	BLACK	2083 RAIL BLK.	5.05	5242 AUTOCOAT L.V	3.2	1.85
	WHITE	FLNA 4006	4.9	5125 AUTOCOAT L.V	3.35	1.55

8/29/95

AKZO

sikkens

Sprayable VOC Worksheet for Hydrocat Mixing

Area 607 Epoxy Primer

Akzo Products Used		VOC lbs/gal	Pkg Size
Coating	LV Epoxy Primer	2.2	Dr
Hardener	LV Epoxy Hardener	3.6	gal
Reducer	LV Epoxy Reducer	7.0	gal
Additives			

Pre-Reduction use this section if no reduction use last section

Product	Amount (Parts)		VOC	Total
Epoxy Primer	36	x	2.2	79.2
Epoxy Reducer	16	x	7.0	112.0
		x		
Totals	52			191.2

Total VOC parts / Total parts = Pre Reduced VOC

191.2 / 52 = 3.68

Mixing Pre-Reduced Paint at Hydrocat must convert ratio to parts

Reduced Paint	Amount (parts)		VOC	Total
Epoxy Primer	4.5	x	3.68	16.56
Epoxy Hardener	1	x	3.6	3.6
	5.5			20.16

Total VOC parts / Total parts = Sprayable VOC at gun

20.16 / 5.5 = 3.66

8/29/95

AKZO

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Sprayable VOC Worksheet for Hydrocat Mixing

Area 607 Topcoat Black

Akzo Products Used		VOC lbs/gal	Pkg Size
Coating	Meta Flex Black	4.5	Dr (30 gal)
Hardener	123 Hardener	5.0	gal
Reducer	X-Slow Reducer	7.71	Dr (53 gal)
Additives			

Pre-Reduction use this section if no reduction use last section

Product	Amount (Parts)		VOC	Total
Meta Flex Black	30	x	4.5	135
X-Slow Reducer	9	x	7.71	69.36
		x		
Totals	39			204.39

Total VOC parts / Total parts = Pre Reduced VOC

204.39 / 39 = 5.24

Mixing Pre-Reduced Paint at Hydrocat must convert ratio to parts

Reduced Paint	Amount (parts)		VOC	Total
Meta Flex Black	6.5	x	5.24	34.06
123 Hardener	1	x	5.0	5.0
	7.5			39.06

Total VOC parts / Total parts = Sprayable VOC at gun

39.06 / 7.5 = 5.21

8/29/95

AKZO

sikkens

Sprayable VOC Worksheet for Hydrocat Mixing

Area 607 Topcoat Red

Akzo Products Used		VOC lbs/gal	Pkg Size
Coating	Red Enamel	4.5	Dr (30g)
Hardener	123 Hardener	5.0	gal
Reducer	TR 10 Reducer	7.73	Dr (53g)
Additives			

Pre-Reduction use this section if no reduction use last section

Product	Amount (Parts)		VOC	Total
Red Enamel	30	x	4.5	135
TR 10 Reducer	9	x	7.73	69.57
		x		
Totals	39			204.57

Total VOC parts / Total parts = Pre Reduced VOC

204.57 / 39 = 5.25

Mixing Pre-Reduced Paint at Hydrocat must convert ratio to parts

Reduced Paint	Amount (parts)		VOC	Total
Red	6.5	x	5.25	34.13
123 Hardener	1	x	5	5
	7.5			39.13

Total VOC parts / Total parts = Sprayable VOC at gun

39.16 / 7.5 = 5.22

8/29/95

AKZO sikkens

Sprayable VOC Worksheet for Hydrocat Mixing

Area 611 Platform Prime

Akzo Products Used		VOC lbs/gal	Pkg Size
Coating	515/84	5.56	30 gal Dr
Hardener	C25/41	6.85	53 gal Dr
Reducer	X-Slow Reducer	7.71	53 gal Dr
Additives			

Pre-Reduction use this section if no reduction use last section

Product	Amount (Parts)		VOC	Total
515/84	30	x	5.56	166.8
X-Slow Reducer	9	x	7.71	69.39
		x		
Totals	39			236.19

Total VOC parts / Total parts = Pre Reduced VOC

236.19 / 39 = 6.06

Mixing Pre-Reduced Paint at Hydrocat must convert ratio to parts

Reduced Paint	Amount (parts)		VOC	Total
515/84	2.5	x	6.06	15.15
C25/41	1	x	6.85	6.85
	3.5			22

Total VOC parts / Total parts = Sprayable VOC at gun

22 / 3.5 = 6.29

8/30/95

AKZO sikkens

Sprayable VOC Worksheet for Hydrocat Mixing

Area 611 Platform Topcoat Black

Akzo Products Used		VOC lbs/gal	Pkg Size
Coating	Meta Flex Black	4.5	30 gal Dr
Hardener	123 Hardener	5.0	gal
Reducer	X-Slow Reducer	7.71	53 gal Dr
Additives			

Pre-Reduction use this section if no reduction use last section

Product	Amount (Parts)		VOC	Total
Meta Flex Black	30	x	4.5	135
X-Slow Reducer	9	x	7.71	69.4
		x		
Totals	39			204.4

Total VOC parts / Total parts = Pre Reduced VOC

204.4 / 39 = 5.24

Mixing Pre-Reduced Paint at Hydrocat must convert ratio to parts

Reduced Paint	Amount (parts)		VOC -	Total
Meta Flex Black	6.8	x	5.24	35.63
123 Hardener	1	x	5.0	5.0
				40.63

Total VOC parts / Total parts = Sprayable VOC at gun

40.63 / 7.8 = 5.21

8/29/95

AKZO

sikkens

Sprayable VOC Worksheet for Hydrocat Mixing

Area 608 + 609 Prime

Akzo Products Used		VOC lbs/gal	Pkg Size
Coating	LV Epoxy Prime	2.2	Dr. 36 gal
Hardener	LV Epoxy Hardener	3.6	gal
Reducer	LV Epoxy Reducer	7.0	gal
Additives			

Pre-Reduction use this section if no reduction use last section

Product	Amount (Parts)		VOC	Total
Epoxy Primer	36	x	2.2	79.2
Epoxy Reducer	12	x	7.0	84
		x		
Totals	48			163.2

Total VOC parts / Total parts = Pre Reduced VOC

163.2 / 48 = 3.4

Mixing Pre-Reduced Paint at Hydrocat must convert ratio to parts

Reduced Paint	Amount (parts)		VOC	Total
Primer	4	x	3.4	13.6
Epoxy Hardener	1	x	3.6	3.6

Total VOC parts / Total parts = Sprayable VOC at gun

17.2 / 5 = 3.44

8/29/95

AKZO sikkens

Sprayable VOC Worksheet for Hydrocat Mixing

Area 610 Tool Box Primer

Akzo Products Used		VOC lbs/gal	Pkg Size
Coating	515/84	5.56	30 gal Dr
Hardener	C25/41	6.85	53 gal Dr
Reducer	X-Slow Reducer	7.71	53 gal Dr
Additives			

Pre-Reduction use this section if no reduction use last section

Product	Amount (Parts)		VOC	Total
515/84	30	x	5.56	166.8
X-Slow Reducer	12	x	7.71	92.52
		x		
Totals	42			259.32

Total VOC parts / Total parts = Pre Reduced VOC

259.32 / 42 = 6.17

Mixing Pre-Reduced Paint at Hydrocat must convert ratio to parts

Reduced Paint	Amount (parts)		VOC	Total
515/84 Prime	4.5	x	6.17	27.77
C25/41	1	x	6.85	6.85
	5.5			34.62

Total VOC parts / Total parts = Sprayable VOC at gun

34.62 / 5.5 = 6.29

8/29/95

AKZO

sikkens

Sprayable VOC Worksheet for Hydrocat Mixing

Area 610 Tool Box Topcoat Black

Akzo Products Used		VOC lbs/gal	Pkg Size
Coating	Autocoat LV Black	2.64	40 gal Dr
Hardener	LV Hardener	2.65	gal
Reducer	LV Reducer	7.0	gal
Additives			

Pre-Reduction use this section if no reduction use last section

Product	Amount (Parts)		VOC	Total
Black	40	x	2.64	105.6
LV Reducer	9	x	7	63
		x		
Totals	49			168.6

Total VOC parts / Total parts = Pre Reduced VOC

168.6 / 49 = 3.44

Mixing Pre-Reduced Paint at Hydrocat must convert ratio to parts

Reduced Paint	Amount (parts)		VOC	Total
LV Black	2.5	x	3.44	8.6
LV Hardener	1	x	2.65	2.65
	3.5			11.25

Total VOC parts / Total parts = Sprayable VOC at gun

11.25 / 3.5 = 3.21

metaflex 3.5 = 50% solids 3.5 VOC

8/29/95

AKZO

sikkens

Sprayable VOC Worksheet for Hydrocat Mixing

Area 610 Tool Box Topcoat White

Akzo Products Used		VOC lbs/gal	Pkg Size
Coating	Autocoat LV White	2.95	30gal Dr
Hardener	LV Hardener	2.65	gal
Reducer	LV Reducer	7.0	gal
Additives			

Pre-Reduction use this section if no reduction use last section

Product	Amount (Parts)		VOC	Total
White	40	x	2.95	118
LV Reducer	8	x	7.0	56
		x		
Totals	48			174

Total VOC parts / Total parts = Pre Reduced VOC

174 / 48 = 3.63

Mixing Pre-Reduced Paint at Hydrocat must convert ratio to parts

Reduced Paint	Amount (parts)		VOC	Total
LV White	2.5	x	3.63	9.08
LV Hardener	1	x	2.65	2.65
				11.73

Total VOC parts / Total parts = Sprayable VOC at gun

11.73 / 3.5 = 3.35

SPRAY Equipment & Service Center Inc

13233

NO.: 101001

DATE: 9/10/93

SHIP VIA: call for routing
FOB: KC Missouri
TERMS: Collect

CUSTOMER CODE: 021037380

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

BILL TO: Knapheide MFG. Company
436 South 6th Street
Quincy IL 62306

SHIP TO: Knapheide MFG. Company
1701 N. 16th St.
Quicny IL 62301

9-15-93 due

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
~~Jim Barnett~~ 413540	8/27/93	Dennis Stover	

QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
1			Infra-Red Drying System		40,862.00	$40,862.0
			As per Quotation dated August 26, 1993	attached	+	61,104
						101,966.00
			TERMS:			
			1/3 Down with Order due	8/27/93		
			1/2 Down on Order - Total prior due to shipping		9/10/93	
			Balance Net 30 Days			
					Amount Due	$34,119.00

OK to Pay
per Dave Kath

9302
100149000

USE AS ORIGINAL

JLC
9.93

ENTERED SEP 14 1993

607

REMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

SPRAY Equipment & Service Center Inc

13233

NO.: IW

DATE: 10/08/93

SHIP VIA: Call for Routing
FOB: KC MO
TERMS: Collect

CUSTOMER CODE: 021037380

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

BILL TO: Knapheide Mfg. Company
436 S. 6th Street
Quincy IL 62302

SHIP TO: Knapheide Mfg. Company
1701 N. 16th St.
Quincy IL 62301

Quincy

10-15-93
due

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
118227	10/01/93	Dennis Stover	

LINE NO.	QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
	1			Infra-Red Drying System		$61,104.00	$61,104.00
				per quotation dated 8/27/93			
				per OK pay 50,686.- when they call - 10,418.- 30 days later 10-14-93	9306 100149000	OK TO PAY	
				TERMS			
				1/3 Down with order due	10/01/93	50,686	~~$20,164.00~~
				1/2 Down prior to shpmt	10/22/93		~~30,522.00~~
				Balance due 30 Days	11/22/93		~~10,388.00~~ 10,418.00
						50686.00	

$1.00
10.93

610

REMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

PAGE: 1

INS:

SPRAY & Service Center

NO.: 040919

DATE: 07/26/94

SHIP VIA: F.O.B. FACTORY

FOB:

TERMS: NET 30

CUSTOMER CODE: 021037380

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

BILL TO: KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

SHIP TO: 0001
KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

13233

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
119915	07/26/94	123 - DENNIS	D06089 02

LINE NO.	QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
001	1	1	0	ENCLOSURE DEVILBISS SHEET METAL 44'W X 30'L X 12'H		36820.00	36820.00

Q=1

9460

100149000

OK
Per Quote

8.44

FREIGHT: 953.99

TOTAL: 37773.99

IF YOU NEED A STATEMENT PLEASE ADVISE.

REMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

INS: RDS

SPRAY Service Center

PAGE: 1

REPRINT

NO.: 042318

DATE: 08/16/94

SHIP VIA: DELIVERED

FOB:

TERMS: NET 30

CUSTOMER CODE: 021037380

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

BILL TO: KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

SHIP TO: 0001
KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

13233

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
119915	08/16/94	123 - DENNIS	D06129 02

LINE NO.	QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
01	1	1	0	TOT-220 SPECIAL WEATHER-RITE AIR MAKE-UP UNIT		17012.00	17012.00
				9460 10 14900			
				8 94	OK (Per Quote)		
				IF YOU NEED A STATEMENT PLEASE ADVISE.		TOTAL:	17012.00

REMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

INS: RDS

SPRAY Service Center

13233

PAGE: 2

NO: 044176

DATE: 09/14/94

SHIP VIA: UPS NDA GRACO

FOB:

TERMS: NET 30

CUSTOMER CODE: 021037380

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

BILL TO:
KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

SHIP TO: 0001
KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
424111	08/09/94	123 - DENNIS	025981 02

LINE NO.	QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
010	4	4	12 0	108-108 GRACO 100 MESH FILTER ELEMENT RED ALERT FILTER		42.08	168.32
011	6	6	6 0	214-698 GRACO 3000 PSI AIRLESS HOSE 25 FOOT 3/16 BLUE COLOR		50.15	300.90
012	4	4	7 0	214-697 GRACO 3000 PSI AIRLESS HOSE 50 FOOT 3/16 BLUE COLOR		84.36	337.44
013							
014				SHIPPING NDA > GRACO			
				9460 10014900			
				10 94		FREIGHT:	78.45
				IF YOU NEED A STATEMENT PLEASE ADVISE.		TOTAL:	1573.60

REMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

SPRAY Equipment & Service Center Inc

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

NO. 044176

DATE: 09/14/94

SHIP VIA: ~~UPS~~ NDA GRACO

FOB:

TERMS: NET 30

CUSTOMER CODE: 021037380

BILL TO: KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

SHIP TO: 0001
KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

13233

OK to pay
Jaw 10/5/94

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
424111	08/09/94	123 - DENNIS	025981 02

LINE NO.	QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
01	1	1	(1) 0	103-347 GRACO POP OFF VALVE 90 PSI		29.70	29.70
02	2	2	(2) 0	101-759 GRACO VALVE		12.58	25.16
03	1	1	(3) 0	180-781 GRACO KIT		13.86	13.86
04	6	6	(4) 0	218-559 GRACO /REPAIR KIT		27.63	165.78
05	3	3	(5) 0	215-930 DISPLACEMENT PUMP 215-913, GRACO REPAIR KIT		56.95	170.85
06	4	4	(8) 0	215-626 MIXER MANIFOLD 103-209 GRACO PACKING		1.87	7.48
07	2	2	(9) 0	104-440 GRACO VALVE		26.18	52.36
08	2	2	(10) 0 ✓	104-125 GRACO RED ALERT FILTER INDICATOR		109.65	219.30
09	2	2	(11) 0 ✓	102-359 GRACO SPRING		2.00	4.00

CONTINUED

INS: RDS

SPRAY Service Center

PAGE: 1

NO.: 042320

DATE: 08/16/94

SHIP VIA: DELIVERED

FOB:

TERMS: NET 30

CUSTOMER CODE: 021037380

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

BILL TO: KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

0001
SHIP TO: KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

13233

OK [illegible] (Jon Wren ordered)

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
120331	08/16/94	123 - DENNIS	D06130 02

LINE NO.	QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
001	400	400	0	TUBE 5/8" X .049 STEEL TUBE		.98	392.00
002	21	21	0	UNION 5/8" TUBE UNION		8.42	176.82
003	2	2	0	TEE 5/8" UNION TEE		16.75	33.50
004	10	10	0	ADAPTER 5/8" TUBE X 1/2 MPT		5.50	55.00
005	4	4	0	MPT 5/8" TUBE TEE X 1/2 MPT		16.75	67.00
006	96	96	0	100062 HYDRA ZORB 5/8 UNI STRUT CLAMP ASSEMBLIES INCLUDING CUSHIONS		1.75	168.00
007	10	10	0	VALVE 1/2" BALL VALVES		7.50	75.00
008	7	7	0	HOSE 3/8" X 8' HIGH PRESS HOSE		17.68	123.76
009	1	1	0	HOSE 3/8" X 14' H.P. HOSE		28.42	28.42

9460
100149002

Jsc 8 94

CONTINUED

1745.51

REMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

246-E So. Union St.
Springfield, Mo. 65802
417-831-1462
FAX 417-831-0855

FOB:
TERMS: NET 30

CUSTOMER CODE: 021037380

BILL TO: KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

0001
SHIP TO: KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
120331	08/16/94	123 - DENNIS	D06130 02

LINE NO.	QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
010	1	1	0	HOSE 3/8" X 10' H.P. HOSE		21.30	21.30
011	3	3	0	HOSE 1/4" X 8' H.P. HOSE		16.30	48.90
012	2	2	0	HOSE 1/4" X 14' H.P. HOSE		12.50	25.00
013	2	2	0	2047-4-4 AEROQUIP SWIVEL ELBOW 1/4F X 1/4M		2.90	5.80
014	1	1	0	2085-4-4 AEROQUIP ELBOW M-M 1/4 X 1/4		2.96	2.96
015	3	3	0	2047-8-6-3 1/2 MPT X 3/8 FS 90'		6.06	18.18
016	4	4	0	2048-8-6 1/2 FPT X 3/8 FS 90'		6.06	24.24
017	2	2	0	2083-8-8 AEROQUIP NIPPLE M-M 1/2		2.46	4.92

CONTINUED

REMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

Equipment & Service Center

8115 "H" Street
Omaha, NE 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

SHIP VIA: DELIVERED
FOB:
TERMS: NET 30
CUSTOMER CODE: 021037380

BILL TO:
KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

0001
SHIP TO:
KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
120331	08/16/94	123 - DENNIS	D06130 02

LINE NO.	QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
018	3	3	0	2081-8-6 AEROQUIP REDUCER/BUSHING 1/2 M X 3/8 F		1.90	5.70
019	3	3	0	2085-6-6 AEROQUIP ELBOW M-M 3/8 X 3/8		2.96	8.88
020	5	5	0	2047-6-6 AEROQUIP SWIVEL ELBOW 3/8F X 3/8M		3.75	18.75
021	6	6	0	2083-4-4 AEROQUIP NIPPLE M-M 1/4		1.20	7.20
022	2	2	0	2083-6-4 AEROQUIP NIPPLE M-M 3/8 X 1/4		1.89	3.78
023	2	2	0	2085-8-8-2 1/2" FPT 90'		4.55	9.10
024	24	24	0	72-1303 BINKS 1/4 " FEMALE FITTING 1/4 " AIR HOSE		2.30	55.20
025	3	3	0	72-1328 BINKS 3/8 FEMALE FITTING 3/8 LOW PRESSURE HOSES		2.30	6.90
026	4	4	0	72-1325 BINKS 1/4 " FEMALE FITTING		2.30	9.20

CONTINUED

REMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

SPRAY Equipment & Service Center Inc

DATE: 08/16/94

115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

SHIP VIA: DELIVERED
FOB:
TERMS: NET 30
CUSTOMER CODE: 021037380

BILL TO:
KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

SHIP TO: 0001
KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
120331	08/16/94	123 - DENNIS	D06130 02

LINE NO.	QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
027	4	4	0	3/8 LOW PRESSURE HOSE 182-514		45.00	180.00
028	4	4	0	GRACO AIR ASSISTED AIRLESS TIP (.014) 10-11 " FAN PATTERN 222-607		42.50	170.00
				GRACO FINE FINISH AIR CAP 217-292 AA GUN			
				IF YOU NEED A STATEMENT PLEASE ADVISE.		TOTAL:	1745.51

REMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

INS: DKE

13233

PAGE: 1

NO: 040397

DATE: 07/18/94

SPRAY & Service Center

8115 "H" Street
Omaha, NE 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

SHIP VIA: UPS
FOB:
TERMS: NET 30

CUSTOMER CODE: 021037380

BILL TO: KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

0001
SHIP TO: KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
303	07/15/94	123 - DENNIS	024854 02

QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
2	2	0	29-551 BINKS DRAFT GAUGE		50.00	100.00
	1					
			#9460 100149000			
					FREIGHT:	3.96
			IF YOU NEED A STATEMENT PLEASE ADVISE.		TOTAL:	103.96

7.94

T TO: P.O. Box 11525 • Wichita, Kansas 67202

MOLLER BUILDING AND HOME CENTER

PAGE NO 1

821 HAMPSHIRE
QUINCY, IL 62301
PHONE: (217) 223-4281

NUMBER 423693 LINE
VENDOR 11217 NAME MOLLER

480

CUSTOMER NO.	JOB NO.	PURCHASE ORDER NO.	REFERENCE	TERMS		CLERK	DATE	TIME
5460		423693		2% 10TH, NET EOM	BB		7/18/94	2:02

SOLD TO: KNAPHEIDE MANUFACTURING CO.
P.O BOX C 140
436 SOUTH SIXTH STREET
QUINCY IL 62306

SHIP TO: KNAPHEIDE MANUFACTURING
NORTH 16TH (OLD SPEEDRACK)

DOC# 923
****
* INVOICE *
****

SLSPR: MM MARK MCGINLEY
TAX : 001 QUINCY ILL

QUANTITY SHIPPED	QUANTITY ORDERED	UM	SKU	DESCRIPTION	SUGG	UNITS	PRICE/PER	EXTENSION
1		EA	6610RM	6X6X10 REMESH 5'X150'		1	58.48 /EA	58.48
				DELIVER TODAY!!!				

#9460
100149000

711

** AMOUNT CHARGED TO STORE ACCOUNT **

62.57	TAXABLE	58.48
	NON-TAXABLE	0.00
	SUBTOTAL	58.48
	TAX AMOUNT	4.09

X Phil Oneal
RECEIVED BY

FASTENAL®
FIRST IN FASTENERS

Remit to
The Fastenal Company
P.O. Box 978
Winona, MN 55987-0978
507-454-5374 Fax 507-454-6542

The store serving you is
506 S. 6th St.
Quincy IL 62301
Phone: 217-223-4117

125598

Invoice

Date	Invoice No.	Page
7/15/94	QNCY30291	1

22.50

Cust. No.	Cust. P.O.	Job No.
QNCY0057	120307	Attn.Dick Nicke

TERMS: Net 30

Sold To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

Ship To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

Please detach and send with remittance to above address

Line No.	Quantity Ordered	Quantity Shipped	Quantity Backorder	Description	Control No.	Part No.	Price /C	Amount
1	500	500	0	HW Tek 10 x 3/4	r6443	32037	4.5000	22.50

1

#9460
100149000

7/94

Received By
Phil Oneal

Tax Exemption
r

Comments

Subtotal	22.50
Shipping & Handling	0.00
State Tax	0.00
0 County Tax	0.00
0 City Tax	0.00
TOTAL	22.50

No materials accepted for return without our permission.
All discrepancies must be reported within 10 days.

Reasonable collection and attorneys fees will be assessed to all accounts placed for collection.

Fastenal Company
P.O. Box 978
Winona, MN 55987-0978

Cust # QNCY0057 Invoice # QNCY30291 7/15/94
PO # 120307 JOB # Attn.Dick Nicke

Please pay from this invoice.
No statement will be sent.

ORIGINAL

STEEL & PIPE SUPPLY COMPANY INC.

12298

INVOICE # 046433

ORDER NUMBER: 753954-ST
ACCOUNT NUMBER: 81693 P.O. # 423641

July 21,1994

Knapheide Mfg. Co.
P.O. Box C-140
436 SOUTH 6TH
Quincy IL 62306

QUANTITY ORDERED	QUANTITY SHIPPED	DESCRIPTION	WEIGHT	PRICE	EXTENSION
1	1	8" 18.4 50 I BEAM CUT TO 3 @ 15'	920 (1)	28.50/CWT	262.20

****
*** Our FAX Number is (913) 587-5174 ***
****

9460

6' 100149000

7.94

920# AMOUNT: 262.20

SHIPPED TO: Knapheide Co.
1701 N. 16th St.
Quincy IL 62301

CODE: 01 --929--016 IL

SALES REPRESENTATIVE: Rick Gatlin

TERMS: .5% 10 NET 30 TAX EX. # 1810332

NET DUE WITHIN 30 DAYS FROM DATE OF INVOICE.
IF PAID BY JUL 31,1994 DEDUCT CASH DISCOUNT OF 1.31
INTEREST OF 1-1/2 PCT PER MONTH CHARGED ON OVERDUE INVOICES

Published commercial tolerances will apply unless specified on customer's written purchase order.

Please remit to P.O.Box 27-249, Kansas City, MO 64180

This form printed on RECOVER™ Recycled Carbonless Paper. New Copying 50% Waste Paper, Including 10% Post Consumer Waste

INVOICE

10272

HARDWARE, INDUSTRIAL & CONTRACTORS SUPPLIES

2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305
217/223-5340
Fax# 217/224-3307

PLEASE REMIT TO:

Black & COMPANY
2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305

KNAPHEIDE MFG. CO.
436 SOUTH 6TH
P. O. BOX C140
QUINCY IL 62306

PURCHASE ORDER NUMBER: 120313

DATE	ACCOUNT NUMBER	TERMS
07/25/94	K0001600000	Net 10th of Month

DATE DUE	INVOICE NUMBER
08/10/94	95725

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
1	VNI BIT #1	14.18	14.18
	TAX		1.00
	#9460		
	10014 9000		
	7.94		

INVOICE TOTALS — TOTAL INVOICE DUE: 15.18

FASTENAL®
FIRST IN FASTENERS

Remit to
The Fastenal Company
P.O. Box 978
Winona, MN 55987-0978
507-454-5374 Fax 507-454-6542

The store serving you is
506 S. 6th St.
Quincy IL 62301
Phone: 217-223-4117

Invoice

Date	Invoice No.	Page
7/19/94	QNCY30385	1

20.05

Cust. No.	Cust. P.O.	Job No.
QNCY0057	423721	

TERMS: Net 30

Sold To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

10598

Ship To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

Please detach and send with remittance to above address

Line No.	Quantity Ordered	Quantity Shipped	Quantity Backorder	Description	Control No.	Part No.	Price /C	Amount
1	50	50	0	SSS CP 1/2-13 x 1/2	r5789	25663	14.6600	7.33
2	12	12	0	T ROD Z 1/4-20 x 6'	j0683	47157	106.0000	12.72

630
950460 7.33

9460
100149000 12.72

7.94

Received By
Phil ONeal

Tax Exemption
r

Comments

Subtotal	20.05
Shipping & Handling	0.00
State Tax	0.00
County Tax	0.00
City Tax	0.00
TOTAL	20.05

No materials accepted for return without our permission.
All discrepancies must be reported within 10 days.

Reasonable collection and attorneys fees will be assessed to all accounts placed for collection.

Fastenal Company
P.O. Box 978
Winona, MN 55987-0978

Cust # QNCY0057 Invoice # QNCY30385 7/19/94
PO # 423721 JOB #

Please pay from this invoice.
No statement will be sent.

Thank You!

D[illegible] NO. 00-294-7703

ORI[illegible]L INVOICE

"SERVICE CENTERS [illegible]ST TO COAST"

McNICHO[illegible]S CO.

Member Steel Service Center Institute

WATS: 800-237-3820
FAX: 813-289-7884
TELEX: 52706

PLEASE REMIT TO-------BOX 931099, CLEVELAND, OH 44193-0376

PAGE 1

INVOICE NO 47658

13730

SOLD TO
THE KNAPHEIDE MFG CO
436 S 6TH ST
P O BOX 140
QUINCY, IL 62306-0140

SHIP TO
KNAPHEIDE MFG CO
ATTN: DICK WHICKER
1701 N 16TH ST
QUINCY, IL 62301

CUSTOMER ORDER NO.	SHIPPED VIA	DATE SHIPPED	CUST. NO.	TERMS	P/C	BR	INVOICE DATE
42368	*CCX*	7/19/94	048402	1/2% 10 NET 30	C	3	7/18/94

CODE	QUAN.	GAUGE	DESCRIPTION	SIZE	MATERIAL	UNIT	UNIT PRICE	AMOUNT
			(2)-1 OPEN GRIP GRATING					
M412151300	15	13	12" X 1.5" OPEN GRIP 264 LBS 12.000 X 48.000		GALV	60	LOT	360.40
			(1) = 80 MCNICHOLS QUALITY PERFORATED METAL					
1634011641 02-3F10	2	16	3/4 RD 1 STG 48 X 120 100 LBS		CR STEEL	80	LOT	172.00

INVOICE TOTAL 532.40

BLESSED IS THE NATION WHOSE GOD IS THE LORD. PSALM 33:12

9460

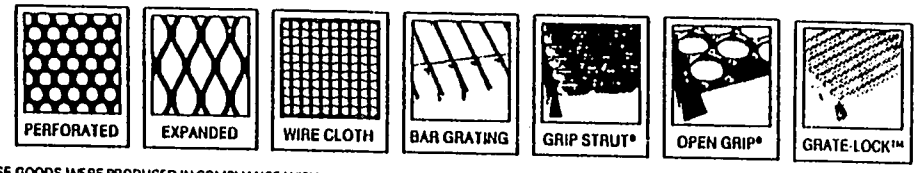
100 14900

7.94

I847727 JMK 030303M1
CHI/CHI

The Hole Story™

PERFORATED | EXPANDED | WIRE CLOTH | BAR GRATING | GRIP STRUT® | OPEN GRIP® | GRATE-LOCK™



IF INVOICE IS
PAID BY 7/28/94
YOU MAY DEDUCT
2.66

WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTIONS 6, 7 AND 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED, AND OF REGULATIONS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR ISSUED UNDER SECTION 14 THEREOF."

A SERVICE CHARGE OF 1½% PER MONTH WILL BE ADDED TO ALL ACCOUNTS WITH A BALANCE OVER 30 DAYS OLD IF THERE IS ANY QUESTION CONCERNING THIS INVOICE PLEASE CALL: TOLL FREE WATS NUMBER 800-237-3820

"I HEREBY CERTIFY THAT THE AMOUNT INVOICED HEREIN DOES NOT EXCEED THE LOWER OF (1) THE CONTRACT PRICE OR (2) MAXIMUM LEVELS ESTABLISHED IN ACCORDANCE WITH EXECUTIVE ORDER 11615, DATED AUGUST 15, 1971."

FURROW
Building Materials
and Full-Line Lumberyard

INVOICE

FURROW BUILDING MATERIALS
5036 BROADWAY
QUINCY, IL 62301
Phone: (217) 223-0103

Number: 0089-083266
Page: 1
Date: 07/15/94

Remit To:
P.O. Box 660333
Dallas, TX 75266

Customer Number: 0201-2722670

SOLD
THE KNAPHEIDE MFG CO
ATTN: A/P
PO BOX C140
QUINCY, IL 62306-2140

12796

Customer P.O. #	120308
Customer Job #	
Authorized Buyer	~~DICK~~ WHICKER
Salesperson	THOMAS H.

Item	Item Description / Comment	UM	Quantity	Unit Price	Extended Total	Tax	Meth
831700	6767-1 SCREWDRIVING KIT	EA	1	149.00	149.00	Y	TAKE
	DISCOUNT CODE: 83		1	5%	7.45-		
			SUBTOTAL		$ 141.55		
			TAX		$ 9.91		
			TOTAL		$ 151.46		

9460
100149000

JR
7.94

TOS 02
ORDER 466412

0031-0078 000000

ORIGINAL INVOICE / REMITTANCE COPY

FASTENAL®
FIRST IN FASTENERS

Remit to
The Fastenal Company
P.O. Box 978
Winona, MN 55987-0978
507-454-5374 Fax 507-454-6542

The store serving you is
506 S. 6th St.
Quincy IL 62301
Phone: 217-223-4117

Invoice

Date	Invoice No.	Page
7/18/94	QNCY30304 22.50	1

TERMS: Net 30

Cust. No.	Cust. P.O.	Job No.
QNCY0057	120309	

Sold To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

Ship To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

10598

Please detach and send with remittance to above address

Line No.	Quantity Ordered	Quantity Shipped	Quantity Backorder	Description	Control No.	Part No.	Price /C	Amount
1	500	500	0	HW Tek 10 x 3/4	r6639	32037	4.5000	22.50

1

9460

100149000

7.94

Received By
Phil

Tax Exemption
r

Comments

Subtotal	22.50
Shipping & Handling	0.00
State Tax	0.00
0 County Tax	0.00
0 City Tax	0.00
TOTAL	22.50

No materials accepted for return without our permission.
All discrepancies must be reported within 10 days.

Reasonable collection and attorneys fees will be assessed to all accounts placed for collection.

Fastenal Company
P.O. Box 978
Winona, MN 55987-0978
(507) 454-5374

Cust # QNCY0057
PO # 120309

Invoice # QNCY30304 7/18/94
JOB #

Please pay from this invoice.
No statement will be sent.

Thank You!

STEEL & PIPE SUPPLY COMPANY INC.

12298

INVOICE # 048644

ORDER NUMBER: 746467-ST
ACCOUNT NUMBER: 81693 P.O. # 423641

July 28,1994

Knapheide Mfg. Co.
P.O. Box C-140
436 SOUTH 6TH
Quincy IL 62306

QUANTITY ORDERED	QUANTITY SHIPPED	DESCRIPTION	WEIGHT	PRICE	EXTENSION
1	1	8" 18.4 30 I BEAM CUT TO 2 @ 15'	552	28.50/CWT	157.32

****
*** Our FAX Number is (913) 587-5174 ***
****

#9460
100149000

Gary
2/94

552# AMOUNT: 157.32

TERMS: .5% 10 NET 30 TAX EX. # 1310332

SHIPPED TO: Knapheide Co.
1701 N. 16th St.
Quincy IL 62301

NET DUE WITHIN 30 DAYS FROM DATE OF INVOICE.
IF PAID BY AUG 7,1994 DEDUCT CASH DISCOUNT OF .79
INTEREST OF 1-1/2 PCT PER MONTH CHARGED ON OVERDUE INVOICES

Published commercial tolerances will apply unless specified on customer's written purchase order.

CODE: 01 —940—010 IL

SALES REPRESENTATIVE: Rick Gatlin

Please remit to P.O.Box 27-249, Kansas City, MO 64180

This form printed on RECOVER™ Recycled Carbonless Paper. New Contains Waste Paper, Including 10% Post Consumer Waste

THOMPSON, INC.
4600 NORTH 24th QUINCY, IL 62301
PHONE 217-223-4580
FAX 217-223-2913

CUST. NO.	INVOICE DATE	INVOICE NO.
1233	AUG. 13, 1994	71063

SHIPPER
KNAPHEIDE MFG.CO.
WEST QUINCY MO

CONSIGNEE
KNAPHEIDE MFG. CO.
QUINCY IL

BILL TO
KNAPHEIDE MFG. CO.
QUINCY IL

REMIT TO
THOMPSON, INC.
4600 NORTH 24th QUINCY, IL 62301
PHONE 217-223-4580
FAX 217-223-2913

SHIP DATE	DRIVER	G/L ACCOUNT	SHIPPER'S NUMBER
8/6/94	JOHN BELL	3100	# 87018

QUANTITY	DESCRIPTION OF COMMODITY	WEIGHT	RATE	AMOUNT
	1 LOAD TRANSFER 9460		FLAT	$ 50.00
H Huggins	10148000 Per H H			
JSL 8/94	Machinery ok per Harold Huggins			

INTERSTATE COMMERCE COMMISSION REGULATIONS REQUIRE THIS BILL TO BE PAID WITHIN 7 DAYS

THIS IS YOUR FREIGHT BILL. NO OTHER INVOICE WILL BE RENDERED. SHOW ALL FREIGHT BILL NUMBERS WHEN REMITTING.

PAY THIS AMOUNT $ 50.00

CUSTOMER'S COPY

INVOICE

1920-1990 Black & COMPANY 70th Anniversary

HARDWARE, INDUSTRIAL & CONTRACTORS SUPPLIES

2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305
217/223-5340
Fax# 217/224-3307

PLEASE REMIT TO:

Black & COMPANY
2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305

KNAPHEIDE MFG. CO.
436 SOUTH 6TH
P. O. BOX C140
QUINCY IL 62306

10202

PURCHASE ORDER NUMBER: 120326

DATE	ACCOUNT NUMBER	TERMS
8/08/94	K000160000	Net 10th of Month

DATE DUE	INVOICE NUMBER
09/10/94	96634

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
5 (1)	PORTER CABLE BLADE JIG SAW	.85	12.75
	TAX		.90
	9460		
	100149000		
	JSC 8.94		

ICE TOTALS

TOTAL INVOICE DUE 13.65

E. BEST PLUMBING AND HEATING SUPPLY CO.

628 JERSEY ST. - P.O. BOX 3426 - QUINCY, ILLINOIS 62305
PHONE AREA CODE 217, 223-3184

INVOICE

DATE	INVOICE NO.	PAGE
08/12/94	66474	1
Invoice		

10533

BILL TO
KNAPHEIDE MFG. CO.
P.O. BOX C140
436 SO. 6TH
QUINCY, IL 62306

SHIP TO
KNAPHEIDE MFG. CO.
P.O. BOX C140
436 SO. 6TH
QUINCY, IL 62306

DESCRIPTION	JOB NUMBER
60085 N. 16TH ST.	

CUSTOMER ORDER NO.	ORDER DATE	CUSTOMER NUMBER	SALES-MAN	PURCHASE ORDER NO.	SHIPPING INSTRUCTIONS	SHIP DATE
	08/12/94	2227131	MIKE1	424110	A60085	08/12/94

QUANTITY ORDERED	QUANTITY SHIPPED	QUANTITY REMAINING	STOCK NUMBER / DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT	EXTENDED PRICE
6.00 (4)	676.00		GOODOR 4 ORTAC HOSE 1/4 94 60 10014900		$0.4500	0.000	$304.20
			JC 844				
			total note				304.20

Net 30

SALE AMOUNT	$304.20
DISCOUNT 0.000	$0.00
TAX (IL/AC/SP)	$21.29
FREIGHT	$0.00
TOTAL	$325.49
DEPOSIT RECEIVED	$0.00
BALANCE DUE	$325.49

Heintz Electric Company

MEMBER NAED FOUNDED 1908

Wholesale Distributors Since 1948

E 217 • 222-0113
17 • 222-7328
25 S. 10TH ST. - BOX 3005
QUINCY, IL 62305

PHONE 319 • 524-9901
FAX 319 • 524-1048
14TH & JOHNSON - BOX 1207
KEOKUK, IA 52632

PHONE 314 • 221-0990
FAX 314 • 221-5224
HIGHWAY 36 E N. 18TH ST.
HANNIBAL MO 63401

INVOICE NUMBER 1101459-01

NAPHD

10757

L
): KNAPHEIDE MFG CO
436 SOUTH 6TH ST
PO BOX C140
QUINCY IL 62306

SHIP TO: KNAPHEIDE MFG NORTH
QUINCY IL

CUSTOMER P.O. NO. 424146

P/TR/INVOICE NUMBER	SLSMN.	ORDER DATE	TAKER	CUSTOMER P.O. NUMBER	DATE
101459-01	104	08/10/94	112	424146	08/10/94

INSTRUCTIONS	FRT.	PAGE NO
	P	1

FREIGHT CODES
P - PREPAID ALLOWED
B-PREPAID ADD
C-COLLECT
T-TAKEN BY CUST.
X-

QUANTITY RED	B.O./RET.	SHIPPED	DISP.	ITEM CODE AND DESCRIPTION	U/M	MULT.	UNIT PRICE	AMOUNT
				NEVER LET FEAR OF STRIKING OUT GET IN YOUR WAY!				
00		100		B-LINE B22-S-10FT-GALV SLOT CH	C		163.75	163.75

1

9460
10014900

8.99

CODE EXPLANATION
TAX APPLICABLE
THE[illegible]UCABLE
[illegible] APPL.
[illegible]ERED
C - CONSIDER COMPLETE
D - DIRECT SHIPMENT
F - FACTORY MINIMUM
rt - RETURNED CYL.

*** THIS IS YOUR INVOICE ***

FREIGHT IN	FREIGHT OUT
0.00	0.00

REMIT TO
BOX 3005
QUINCY, IL 62305

PER MONTH (18% PER YEAR) FINANCE
IGE ON PAST DUE ACCOUNTS.

NET TERMS: PROX 10 DUE: 09/10/94
*** ORDER COMPLETED ***
YOU MAY DEDUCT A CASH DISCOUNT
OF $1.64 IF PAID BY 09/10/94

SUB TOTAL LABOR	163.75
FREIGHT TOTAL	0.00
STATE TAX	0.00
TOTAL AMT DUE	

Dis 1.64

ORIGINAL INVOICE

BEST PLUMBING AND HEATING SUPPLY CO.

628 JERSEY ST. - P.O. BOX 3426 - QUINCY, ILLINOIS 62305
PHONE AREA CODE 217, 223-3184

INVOICE

10533

DATE	INVOICE NO.	PAGE
08/12/94	66475	1
Invoice		

KNAPHEIDE MFG. CO.
P.O. BOX C140
436 SO. 6TH
QUINCY, IL 62306

SHIP TO
KNAPHEIDE MFG. CO.
P.O. BOX C140
436 SO. 6TH
QUINCY, IL 62306

DESCRIPTION	JOB NUMBER
9602	

CUSTOMER ORDER NO.	ORDER DATE	CUSTOMER NUMBER	SALES-MAN	PURCHASE ORDER NO.	SHIPPING INSTRUCTIONS	SHIP DATE
	08/12/94	2227131	MIKE1	424110	A59602	08/12/94

QUANTITY ORDERED	QUANTITY SHIPPED	REMAINING	UNIT	UNIT PRICE	DISCOUNT	EXTENDED PRICE
12.00	1 12.00			$0.6600	0.000	$7.92
			RECT50			
			TEFLON TAPE 1/2X260"			
6.00	2 6.00			$0.4700	0.000	$2.82
			SHER119 42			
			1/4H-1/8IP 119 HOSE NIPPLE			
			9460			
			10014900			

8-94

M Net 30

SALE AMOUNT	$10.74
DISCOUNT 0.000	$0.00
TAX (IL/AC/SP)	$0.75
FREIGHT	$0.00
TOTAL	$11.49
DEPOSIT RECEIVED	$0.00
BALANCE DUE	$11.49

ACCO[illegible]TI

/15

MOLLER BUILDING AND HOM[illegible]TER

PAGE NO 1

821 HAMPSHIRE
QUINCY, IL 62301
PHONE: (217) 223-4281

THANK YOU FOR SHOPPING AT
MOLLER BUILDING AND HOME CENTERS

11217

CUSTOMER NO.	JOB NO.	PURCHASE ORDER NO.	REFERENCE	TERMS	CLERK	DATE	TIME
5460		424156		2% 10TH, NET EOM GB		8/12/94	9:04

SOLD TO
KNAPHEIDE MANUFACTURING CO.
P O BOX C 140
436 SOUTH SIXTH STREET
QUINCY IL 62306

SHIP TO

DOC# 2264
****
* INVOICE *
****

SLSPR: MM MARK MCGINLEY
TAX : 001 QUINCY ILL.

QUANTITY SHIPPED	QUANTITY ORDERED	UM	SKU	DESCRIPTION	SUGG	UNITS	PRICE/PER	EXTENSION
				DELIVER TO NORTH 16TH ST THIS MORNING AS SOON AS CAN AS PER JOHN WREH				
2	1	EA	65	12LB DAMTITE ANCHOR CEMENT		2	8.05 /EA	16.10
				9460 100149000				
			8.94					
			23	** AMOUNT CHARGED TO STORE ACCOUNT **		17.23	TAXABLE	16.10
							NON-TAXABLE	0.00
							SUBTOTAL	16.10
							TAX AMOUNT	1.13
							TOTAL AMOUNT	17.23

X [signature]
RECEIVED BY

INVOICE

1920-1990 Black & COMPANY 70th Anniversary

HARDWARE, INDUSTRIAL & CONTRACTORS SUPPLIES

2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305
217/223-5340
Fax# 217/224-3307

PLEASE REMIT TO:

Black & COMPANY
2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305

KNAPHEIDE MFG. CO.
436 SOUTH 6TH
P. O. BOX C140
QUINCY IL 62306

10202

PURCHASE ORDER NUMBER
120325

DATE	ACCOUNT NUMBER	TERMS
8/08/94	K0001600000	Net 10th of Month

DATE DUE	INVOICE NUMBER
09/10/94	96620

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
0	ANCHOR BOLTS	1.00	4.00
	TAX		.28
	9460		
	100149000		
	8.99		

ICE TOTALS

TOTAL INVOICE DUE → 4.28

INVOICE

1920-1990 Black & COMPANY 70th Anniversary

HARDWARE, INDUSTRIAL & CONTRACTORS SUPPLIES

2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305
217/223-5340
Fax# 217/224-3307

PLEASE REMIT TO:

Black & COMPANY
2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305

KNAPHEIDE MFG. CO.
436 SOUTH 6TH
P. O. BOX C140
QUINCY IL 62306

10202

PURCHASE ORDER NUMBER: 120327

DATE	ACCOUNT NUMBER	TERMS
8/09/94	K000160000	Net 10th of Month

DATE DUE	INVOICE NUMBER
09/10/94	96635

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
1	11910 3/8 EXTENSION	4.59	4.59
2	20211 9/16 COMBO WRENCH	5.68	5.68
3	19115 3/8 DRIVE SET	25.74	25.74
	TAX		2.52

9460

100 149000

JS 8.94

ICE TOTALS

TOTAL INVOICE 38.53

JAMES SUPPLY CO.
111 North 10th St.
QUINCY, ILLINOIS 62301
(217) 223-3866
1-800-369-3866
FAX 217-223-9988

INVOICE NO: 30370 Invoice
INVOICE DATE: 07/26/94
PAGE: 1

OLD TO:

The Knapheide Mfg. Co.
P.O. Box C-140

Quincy, IL 62306

10911

SHIP TO:

The Knapheide Mfg. Co.

Description	Order Date	Cust PO #	Sales Ord	Shipping Instructions
UNIBIT	07/22/94	423799		PICK UP

ITEM	ORDER	SHIP	DESCRIPTION	PRICE	AMOUNT
		1.00	#2 UNIBIT	$13.90	$13.90

9460
100149000

JSZ 8.94

Terms:
NET 30

Disc. (0.000):	$0.00
Subtotal :	$13.90
Tax (IL/AC/AC):	$0.97
Freight :	$0.00
Less Deposit :	$0.00
Amount Due :	$14.87

FASTENAL
FIRST IN FASTENERS

Remit to
The Fastenal Company
P.O. Box 978
Winona, MN 55987-0978
507-454-5374 Fax 507-454-6542

The store serving you is
506 S. 6th St.
Quincy IL 62301
Phone: 217-223-4117

Invoice

Date	Invoice No.	Page
7/25/94	QNCY30533	1
	14.70	

TERMS: Net 30

Cust. No.	Cust. P.O.	Job No.
QNCY0057	120318	Attn:Dick Wicke

Sold To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

Ship To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

10598

Please detach and send with remittance to above address

Line No.	Quantity Ordered	Quantity Shipped	Quantity Backorder	Description	Control No.	Part No.	Price /C	Amount
1	250	250	0	HW Tek 10 x 1 1/4	i0436	32039	5.8800	14.70

9460
10149000

8.94

Received By

Comments

Tax Exemption

Subtotal	14.70
Shipping & Handling	0.00
State Tax	0.00
County Tax	0.00
City Tax	0.00
TOTAL	14.70

No materials accepted for return without our permission.
All discrepancies must be reported within 10 days.

Reasonable collection and attorneys fees will be assessed to all accounts placed for collection.

Fastenal Company
P.O. Box 978
Winona, MN 55987-0978

Cust # QNCY0057 Invoice # QNCY30533 7/25/94
PO # 120318 JOB # Attn:Dick Wicke

Please pay from this invoice.
No statement will be sent.

INVOICE

1920-1990 Black & COMPANY 70th Anniversary

HARDWARE, INDUSTRIAL & CONTRACTORS SUPPLIES

2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305
217/223-5340
Fax# 217/224-3307

PLEASE REMIT TO:

Black & COMPANY
2534 KATHERINE RD.
P. O. BOX 3095
QUINCY, IL 62305

KNAPHEIDE MFG. CO.
436 SOUTH 6TH
P. O. BOX C140
QUINCY IL 62306

10202

PURCHASE ORDER NUMBER: 120330

DATE	ACCOUNT NUMBER	TERMS	DATE DUE	INVOICE NUMBER
08/12/94	K000160000	Net 10th of Month	09/10/94	96760

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
1 (1)	MAGNA 41180	4.52	4.52
2 (2)	MAGNA 31452	2.48	4.96
	TAX		.67

9460
10149000

JW
8.94

OICE TOTALS

TOTAL INVOICE DUE 10.15

FASTENAL®
FIRST IN FASTENERS

Remit to
The Fastenal Company
P.O. Box 978
Winona, MN 55987-0978
507-454-5374 Fax 507-454-6542

Invoice

Date	Invoice No.	Page
8/11/94	QNCY31055 41.90	1

The store serving you is
506 S. 6th St.
Quincy IL 62301
Phone: 217-223-4117

Cust. No.	Cust. P.O.	Job No.
QNCY0057	119957	

TERMS: Net 30

Sold To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

Ship To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

10598

Please detach and send with remittance to above address

Line No.	Quantity Ordered	Quantity Shipped	Quantity Backorder	Description	Control No.	Part No.	Price	Amount
1	2	(1) 73 2	0	SDS 5/16 x 6 OAL	r6498	54272	1,130.0000 33.96	22.60
2	1	1	0	SDS 5/16 x 6 OAL	r5929	54272	1,130.0000	11.30
3	50	(2) 50	0	HNS 5/16 x 1 1/2	i4806	50303	16.0000	8.00

9460

100 149000

Je
8 94

Received By

Comments

Tax Exemption
r

Subtotal	41.90
Shipping & Handling	0.00
State Tax	0.00
0 County Tax	0.00
0 City Tax	0.00
TOTAL	41.90

No materials accepted for return without our permission.
All discrepancies must be reported within 10 days.

Reasonable collection and attorneys fees will be assessed to all accounts placed for collection.

Fastenal Company
P.O. Box 978
Winona, MN 55987-0978
(507) 454-5374

Cust # QNCY0057
PO # 119957

Invoice # QNCY31055 8/11/94
JOB #

Please pay from this invoice.
No statement will be sent.

Thank You!

CUSTOMER ORIGINAL INVOICE

AWERKAMP MACHINE CO.

STEEL SALES DIVISION
321 BROADWAY
QUINCY, ILLINOIS 62301
217 • 222-3490
FAX 217 • 222-3577

SUBMIT TO: 237 NORTH 7TH ST. • QUINCY, IL 62301

SALES-FABRICATION
STEEL-HOT & COLD ROLL
STAINLESS
BRASS
ALUMINUM
AUGER FLIGHTING
PIPE & TUBING

WD 58986

INVOICE

10164

SOLD TO: 350000 217-222-7131
KNAPHEIDE MANUFACTURING CO.
436 S. 6TH ST.
P.O. BOX C140
QUINCY, IL. 62306

JOB DESCRIPTION: Deliver - North 16th
ASAP

DATE RECEIVED	SOLD BY	CASH	CHARGE	CUSTOMER ORDER NO.	PRIORITY	TELEPHONE
8-11-94	SM	,	X	424153		John Wrenn

QUANTITY	STOCK NO.	CUSTOMER PART NO.	MATERIAL DESCRIPTION	UNIT	UNIT LIST	UNIT COST	AMOUNT
5pcs	4280607		5/8" OD x 16ga				
			Hydraulic Fluid Line				
			Tubing x 20ft		2.16	1.57	157 00
1pc	4280607		5/8" OD x 16ga				
			Hydraulic Fluid Line				
			Tubing x 14ft 6in		2.16	1.57	22 77
		114.50					
			Short & full lengths				179 77
			9460				
			100149000				
		8.94					

NOTED BY	AMOUNT	RECEIVED/AUTHORIZED BY
		X _____ (AUTHORIZED AGENT)

NON TAXABLE	LABOR	
RESALE	MATERIAL	179 77
ILL. SALE	delivery OTHER CHARGES	7 50
MO. SALE	TAX	M+E EXEMPT
	TOTAL	187 27

NET 30 DAYS after date of invoice 8-11-94 1½% per month (18% per year) INCE CHARGE added on past Due Accounts. I authorize the above described work and, along with any ecessary material, agree to pay for same on the terms described above. I agree to pay all costs of collection cluding reasonable attorney fees if collection must be made by suite or otherwise.

Please Pay From This Invoice. Statements Not Mailed

INVOICE NO. WD 58986

& HOME

CU... ATURE 11452

8853269 CASH-1 7443 0001 002

INVOICE #: 00010027443

64283630	EXTENTION 3/8DR	N	3.49
64281975	SOCKET,3/8DR	N	3.49
64283520	RATCHET 3/8DR .*	N	13.49
64283520	RATCHET 3/8DR .*	N	13.49
64281140	WRENCH, ADJUSTABL	N	9.99
64283724	EXTENSION,	N	3.99
64282686	WRENCH COMB.	N	5.49
1341412	PUNCH, ALIGN.	N	4.49
	TOTAL		163.73

ACCOUNT NUMBER 10510

FARM AND HOME CHRG 163.73

08/09/94 18:35

① -1 IW 27443 163.73

9460

100 149000

PO# 120329

Jr 894

CUSTOMER COPY

CHARGE

☐ FARM & HOME CHARGE ☐ DISCOVER ☐ VISA ☐ MASTER CARD ☐ A.E.

IMPORTANT: KEEP THIS COPY FOR STATEMENT VERIFICATION

FARM & HOME

CU... STOMER SIGN... ATURE

10510

KNAPHEIDE MFG. CO. 11452

436 S. 6TH STREET

QUINCY ,IL 062306

181-0332

8853269 CASH-1 7443 0001 002

INVOICE #: 00010027443

62650016	APRON, BIB 10			
	2 @	4.99	N	9.98
63460072	APRON, CARPENTERS		N	3.49
64282699	WRENCH COMB.		N	4.99
64281140	WRENCH, ADJUSTABL		N	9.99
64283520	RATCHET 3/8DR .*		N	13.49
64282699	WRENCH COMB.		N	4.99
1341412	PUNCH, ALIGN.		N	4.49
64280853	PLIER, LOCK GRIP		N	9.49
64280853	PLIER, LOCK GRIP		N	9.49
64281962	SOCKET,3/8DR		N	2.99
64282699	WRENCH COMB.		N	4.99
64282686	WRENCH COMB.		N	5.49
64282686	WRENCH COMB.		N	5.49
64281962	SOCKET,3/8DR		N	2.99
64281975	SOCKET,3/8DR		N	3.49
64281975	SOCKET,3/8DR		N	3.49
64281962	SOCKET,3/8DR		N	2.99
64283630	EXTENTION 3/8DR		N	3.49

PO# 120329

CUSTOMER COPY

CHARGE

☐ FARM & HOME CHARGE ☐ DISCOVER ☐ VISA ☐ MASTER CARD ☐ A

IMPORTANT: KEEP THIS COPY FOR STATEMENT VERIFICATIO

CENTRAL WELDING SUPPLIES, INC.

10310

DEALERS IN
WELDING & CUTTING GASES, APPARATUS & SUPPLIES
ARC WELDING MACHINES – NATIONAL CARBIDE

210 SPRING ST. • P.O. BOX 1221 • QUINCY, ILLINOIS 62306 • 217-222-1253

AIRCO Distributor

INVOICE

INVOICE NO.	INVOICE DATE
185590	08/19/94

SLSMN	TERR.	SHIPPED VIA	CUST. ACCT. #	SHIPPING TICKET #	CUSTOMER P.O. #	DATE OF ORDER	TERMS		PAGE
1	1	OUR TRUCK:N	45600	194539 00	120334	08/19/94	NET THE 30TH		1

BILL TO
KNAPHEIDE MFG. CO.
ATTN ACCTS PAYABLE
P.O.BOX C140
QUINCY IL 62306

SHIP TO
KNAPHEIDE MFG
1701 NO 16TH

PART NUMBER	QTY. SHIPPED	QTY. B/O	CYLINDER SHIPPED	CYLINDER RETURNED	DESCRIPTION	UNIT	UNIT PRICE	AMOUNT
RT WELDR 1	1		0	0	RENTAL - WELDER 1CF @ ********/100CF	EA	95.00	95.00
DELIVERY TICKET 194539								
							Subtotal	95.00

#9460
100149000

OK to pay
per Dick Whicker
we used & returned

Exempt?

TERMS: NET 10TH PROX. A Finance Charge of 2% per month (24% per year) minimum charge of $1.00 will be added to past due accounts.

SHIPPING BRANCH

SALES TAX	DELIVERY	TOTAL
6.65	.00	101.65

BRINKMAN & WIEMELT PLBG. CONT., INC
2510 ELLINGTON RD.
CHINCOTEAGUE, IL 60007

JOB INVOICE

13827

1978

TO Knaphidos Mfg.

ATTN

TERMS PO 424225

DATE ORDERED	ORDER TAKEN BY
PHONE	CUSTOMER ORDER NO.
JOB NO.	
JOB LOCATION	
JOB PHONE	STARTING DATE 9-18-94

QTY.	MATERIAL	UNIT PRICE	AMOUNT
	See Attached Sheets.		1,633.57
	9460		
	10014900		
	JS 8.94		
	TOTAL		1,633.57

DESCRIPTION OF WORK

1. RAN Air Lines in new Bake OVENS.
2. RAN Fresh Air Line to new location
3. RAN New Gas Line : Hooked up OVEN.
4. MOVED Cold water Return 1¼"

~~MISCELLANEOUS CHARGES~~

Custom Welders Charge	$400.00
TOTAL	

LABOR	HRS	RATE	
	72.5	$35	2,537.50
TOTAL			2,537.50

WORK ORDERED BY

DATE ORDERED

DATE COMPLETED

CUSTOMER SIGNATURE FOR APPROVAL

AUTHORIZED SIGNATURE [signature]

COST SUMMARY

TOTAL LABOR	2,537.50
TOTAL MATERIALS	1,633.57
TOTAL MISC.	$400.00
SUB TOTAL	
TAX	
GRAND TOTAL	4,571.07

PALMYRA SHEET METAL
601 West Ross
PALMYRA, MISSOURI 63461
Phone 769-3271

13391

SOLD BY	DATE 8-22 1994
NAME Knapheide manufacturing co	PHONE
ADDRESS	
CITY PO# 120317	

☐ CASH ☐ CHARGE ☐ MDSE. RETD. PREVIOUS BALANCE
☐ C.O.D. ☐ PAID OUT ☐ PD. ON ACCT.

30"X30" ducting - 22 ga galv	
4 - 30X30 elbows	
4 - 30X30 offsets	
2 - 34" roof curbs ① = 1	
2 - 30" storm collars	
1 - 26" roof curb	
1 - 26" storm collar	
20X60 ducting - 22 gage galv.	
24X60 " " " " "	3,761.00
4 - 30" X 30" opposed	
blade dampers with	
controls.	432.00
	4193.00
tax	271.50
labor to install	1,120.00
total	$ ~~5584.50~~
#9460	5313.00
100149000	
Ck 9.94	

Thank You! RECEIVED BY exemption

50th WIESE ANNIVERSARY 1944 1994

MISSOURI: St. Louis • Hannibal • Sikeston • Columbia
ILLINOIS: Sauget • Peoria • Mt. Vernon • Decatur • La Sal
INDIANA: Indianapolis • Ft. Wayne • Lafayette • Muncie

REMIT TO: WIESE PLANNING & ENG. INC.
P.O. BOX 60106
ST. LOUIS, MISSOURI 63160

KNAPHEIDE MFG CO
436 S 6TH ST
PO BOX C 140
QUINCY ILL 62306

12047

TERMS: NET 10 DAYS

A FINANCE CHARGE OF 1½% PER MONT. WILL BE ADDED TO PAST DUE ACCOUNTS

INVOICE NO.	INVOICE DATE	CUSTOMER NO.	BR.	DATE	SALESMAN	PAGE
RS17102	8/23/94	0572000	00			1

PURCHASE ORDER NO.	MAKE	MODEL	SERIAL NUMBER	EQ-NO.	MACHINE HRS.
120304	JLG	CM1432	0200007345		

QTY. SHIP	QTY. B/O	PART NUMBER	DESCRIPTION	UNIT PRICE	TOTAL
		RENTAL CHARGE: FROM 8/08/94 TO 8/12/94			
		FOR 1 WEEK RENTAL			
		*** END OF RENTAL ***			
1			RENTAL CHARGE	180.00	
1			DRAYAGE CHARGE	140.00	
			TOTAL	OTHER	320.00
		*** 0000			
		**** 0000			

(1) cl

#9460

100149000

9.94

*-NON-RETURNABLE ITEM
#-RESTOCKING CHARGE APPLIED

• PARTS RETURNED MUST BE ACCOMPANIED BY ORIGINAL INVOICE.

• RETURNS SUBJECT TO RE-STOCKING CHARGE

• CLAIMS FOR SHORTAGES MUST BE MADE WITHIN TEN DAYS

PAY THIS AMOUNT ▶ 320.00

AMOUNT CREDITED ▶

INVOICE

ORIGINAL INVOICE

E. BEST PLUMBING AND HEATING SUPPLY CO.

INVOICE

628 JERSEY ST. - P.O. BOX 3426 - QUINCY, ILLINOIS 62305

PHONE AREA CODE 217. 223-3184

10533

DATE	INVOICE NO.	PAGE
08/17/94	66867	1
Invoice		

BILL TO

KNAPHEIDE MFG. CO.
P.O. BOX C140
436 SO. 6TH
QUINCY, IL 62306

SHIP TO

KNAPHEIDE MFG. CO.
P.O. BOX C140
436 SO. 6TH
QUINCY, IL 62306

DESCRIPTION	JOB NUMBER
60073 PLUS FRT.	

CUSTOMER ORDER NO.	ORDER DATE	CUSTOMER NUMBER	SALES-MAN	PURCHASE ORDER NO.	SHIPPING INSTRUCTIONS	SHIP DATE
	08/17/94	2227131	MIKE1	424110	A60073	08/17/94

QUANTITY ORDERED	QUANTITY SHIPPED	QUANTITY REMAINING	STOCK NUMBER / DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT	EXTENDED PRICE
6.00	6.00	3	76-101 1/4" APOLLO STAINLESS		$23.7500	0.000	$142.50
0.00	0.00		STEEL BALL VALVES		$0.0000	0.000	$0.00
0.00	0.00		SPECIAL ORDER!!		$0.0000	0.000	$0.00

9460
100 149000

92
9.94

Net 30

SALE AMOUNT	$142.50
DISCOUNT 0.000	$0.00
TAX (IL/AC/SP)	$9.98
FREIGHT	$21.00
TOTAL	$173.48
DEPOSIT RECEIVED	$0.00
BALANCE DUE	$173.48

13233

PAGE: 1

INS: DKG

SPRAY & Service Center

NO.: 043296

DATE: 08/31/94

SHIP VIA: UPS
FOB:
TERMS: NET 30
CUSTOMER CODE: 021037380

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

BILL TO:
KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

0001
SHIP TO:
KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
418	08/26/94	123 - DENNIS	026868 02

QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
2	2 (1)	0	214-711 GRACO 3 WAY BALL VALVE 5000 PSI VITON SEALS COMING FROM 01 #9460 10/149000		62.35	124.70
					FREIGHT:	3.79
			IF YOU NEED A STATEMENT PLEASE ADVISE.		TOTAL:	128.49

9.94

:MIT TO: P.O. Box 11525 • Wichita, Kansas 67202

RICHARDS ELECTRIC MOTOR CO.

426 STATE STREET QUINCY, ILLINOIS 62301
AREA 217 • 222-7154 or 222-7162

EASA

SOLD TO:
KNAPHEIDE MANUFACTURING
436 SO. 6TH STREET
P.O. BOX C 140
QUINCY IL 62306-2140

SHIP TO:

Complete Motor Service
REWINDING — NEW MOTORS — BELTS
CONTROLS • PULLEYS-GEAR REDUCERS

CUSTOMER ORDER NO.	SOLD BY	CUST. NO.	SHIP VIA	DATE	INVOICE NO.
120305		00208		08/31/94	S73598

QUAN.	DESCRIPTION	CODE	LIST	UNIT PRICE	AMOUNT
	INSTALL NEW PAINT OVEN PER QUOTE.	0450		LABOR	6618.30
		0954		PARTS	1241.41
				SUBTOTAL	7859.71
				TOTAL	7859.71

① = 1

#9460
100 149 000

9.99

TERMS: ALL ACCOUNTS DUE 10TH OF MONTH FOLLOWING DATE OF PURCHASE. IF NOT PAID WITHIN THIS PERIOD, CREDIT ARRANGEMENTS MUST BE MADE WITH OUR OFFICE.

WE APPRECIATE YOUR BUSINESS

NET

RICHARDS ELECTRIC MOTOR CO.

426 STATE STREET QUINCY, ILLINOIS 62301
AREA 217 • 222-7154 or 222-7162

EASA

Complete Motor Service
REWINDING — NEW MOTORS — BELTS
CONTROLS - PULLEYS-GEAR REDUCERS

SOLD TO:
KNAPHEIDE MANUFACTURING
436 SO. 6TH STREET
P.O. BOX C 140
QUINCY IL 62306-2140

SHIP TO:

CUSTOMER ORDER NO.	SOLD BY	CUST. NO.	SHIP VIA	DATE	INVOICE NO.
424320		00208		08/31/94	S73117

QUAN.	DESCRIPTION	CODE	LIST	UNIT PRICE	AMOUNT
	PAINT BOOTH EXTRAS.	0450		LABOR	1335.01
	LIGHTS BEHIND PAINT BOOTH &	0954		PARTS	976.61
	DRY OVEN & DOOR INTERLOCKS.				
	RELEASE SOLEONOID ON HOIST.			SUBTOTAL	2311.62
	PUMPS REMAINS TO BE DONE.				
				TOTAL	2311.62
	NOTE: PARTIAL BILLING.				
		9 = 1.			
	#9460				
	100 149000				
	9.94				

TERMS: ALL ACCOUNTS DUE 10TH OF MONTH FOLLOWING DATE OF PURCHASE. IF NOT PAID WITHIN THIS PERIOD, CREDIT ARRANGEMENTS MUST BE MADE WITH OUR OFFICE.

NET

WE APPRECIATE YOUR BUSINESS

RICHARDS ELECTRIC MOTOR CO.

426 STATE STREET QUINCY, ILLINOIS 62301
AREA 217 • 222-7154 or 222-7162

EASA

SOLD TO:
KNAPHEIDE MANUFACTURING
436 SO. 6TH STREET
P.O. BOX C 140
QUINCY IL 62306-2140

Complete Motor Service
REWINDING — NEW MOTORS — BELTS
CONTROLS - PULLEYS-GEAR REDUCERS

SHIP TO:

ME Dept

CUSTOMER ORDER NO.	SOLD BY	CUST. NO.	SHIP VIA	DATE	INVOICE NO.
120337		00208		08/31/94	S74077

QUAN.	DESCRIPTION	CODE	LIST	UNIT PRICE	AMOUNT
	INSTALLE PUSHBUTTONS ON PAINT	0450		LABOR	435.75
	OVEN TO CONTROL AUDIBLE	0954		PARTS	320.84
	ALARMS FOR OPERATORS.				
				SUBTOTAL	756.59
				TOTAL	756.59
				MACH EXEMP	

① = 1

#9460

100149000

JD
9.94

TERMS: ALL ACCOUNTS DUE 10TH OF MONTH FOLLOWING DATE OF PURCHASE. IF NOT PAID WITHIN THIS PERIOD, CREDIT ARRANGEMENTS MUST BE MADE WITH OUR OFFICE.

NET

WE APPRECIATE YOUR BUSINESS

CRESCENT OF QUINCY INC.
* * * I N V O I C E * * *

mber : 4648 - Invoice
Account: 11160
Slm # : HOUSE

Date: 09/01/94
Page: 1

Bill To:
KNAPHEIDE MFG. CO.
PO BOX C 140

QUINCY, IL 62306

10429

Ship To:
KNAPHEIDE MFG. CO.
PO BOX C 140

QUINCY, IL 62306

120302-

scription	Order Date	Cust PO #	Sales Ord	Shipping Instructions
voice	09/01/94	QUOTE	003048	D WICKER

de	Quantity	UM	Description	Price	Amount
	204	EA	FILTERS FAC F20X48X1 QUOTED PER STEVE O"QUINN THIS IS REBILL TO CORRECT QUOTED PRICE	$2.97	$605.88

L

9460

10014900

9.94

rms:
2% 10th Prox

t Payment to:

CRESCENT OF QUINCY INC.
635 NO 3RD

QUINCY, IL 62301

Disc. (0.000):	$0.00
Subtotal :	$605.88
Tax (ILLINOIS):	$42.41
Freight :	$0.00
Less Deposit :	$0.00
Amount Due :	$648.29

FASTENAL®
FIRST IN FASTENERS

Remit to
The Fastenal Company
P.O. Box 978
Winona, MN 55987-0978
507-454-5374 Fax 507-454-6542

The store serving you is
506 S. 6th St.
Quincy IL 62301
Phone: 217-223-4117

Invoice

Date	Invoice No.	Page
9/ 7/94	QNCY31868	1
	14.05	

Cust. No.	Cust. P.O.	Job No.
QNCY0057	120460	

TERMS: Net 30

Sold To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

Ship To
Knapheide Manufacturing Co.
P.O. Box C140
Quincy IL 62306-2140

10598

Please detach and send with remittance to above address

Line No.	Quantity Ordered	Quantity Shipped	Quantity Backorder	Description	Control No.	Part No.	Price	Amount
1	100	100	0	PPh Tek. 10 x 3/4	r6490	32012	4.9800	4.98
2	50	50	0	PhFl Waf H 10 x1 1/2	r6731	32093	7.5000	3.75
3	50	50	0	PhFlWaf 10-24x1 7/16	r6695	32089	10.6300	5.32

CD-1

9460

100149000

9/22
9.94

Received By

Comments

Tax Exemption
r

Subtotal	14.05
Shipping & Handling	0.00
State Tax	0.00
0 County Tax	0.00
0 City Tax	0.00
TOTAL	14.05

No materials accepted for return without our permission.
All discrepancies must be reported within 10 days.

Reasonable collection and attorneys fees will be assessed to all accounts placed for collection.

Fastenal Company
P.O. Box 978

Cust # QNCY0057 Invoice # QNCY31868 9/ 7/94
PO # 120460 JOB #

Please pay from this invoice.
No statement will be sent.

13867

SPARROW PLUMBING & HEATING, INC.
313 Delaware
QUINCY, ILLINOIS 62301

Dea I told Carol I needed this will broken down, when she did she found an error. Do you want to do anoth receiv?

Knapheide Manufacturing Co.
C/O Linda
436 South 6th Street
Quincy, Illinois 62301

Sept. 8, 1994 9.8.94 IN

P.O. 12031

8-5-94 thru 8-18-94 Installed sprinkler system in Paint Booth.

79½-hours labor @ $45.00	$3,577.50	13-hrs. labor @ $67.50=	877.50
Architechnics	2,200.00	24-Sprinkler heads	240.00
3-1¼" 90's	8.52	1-1½x1¼x1¼" tee	5.62
6-1¼" tee's	19.20	1-1" valve for drain	175.00
3-3" 90's	44.70	1-3" victaulic tee &	
1-3"x3"x1½" tee	25.60	3-3" grippers	
1-3"x2½"x1½" tee	25.60	1-3" control valve	185.00
1-2½"x2"x1½" tee	15.60	1-2"x1½"x1½"	8.20
1-1½" 90	2.84	4-1½x1¼x1½" tee's	22.48
4-1½x1¼x1¼" tee's	22.48	24-1¼"x½" reducer	43.92
20-1¼" 90's	39.20	21-ft. 3" sch. 40 blk.	117.81
12-ft. 2½" sch. 40 blk.	51.24	12-ft. 2" sch. 40 blk.	32.04
63-ft. 1½" sch. 40 blk.	124.11	180-ft. 1¼" pipe	300.60
40-hangers	60.00	20-ft. 3/8" rod	8.00
			$8,232.76

①=1

9460

10014900

9.94

(217) 223-9289
FAX (217) 223-9295

WATERLOO, ILLINOIS 62298
PHONE 939-6015

SUXP 3186

PRO. 645517

DATE 8-1-94

CONSIGNEE, ADDRESS AND DESTINATION

Knapheide
1701 North 16th St.
Quincy, Il. 62230

SHIPPER, ADDRESS AND ORIGIN

B. J. Alberts Co.,Inc.

Wichita, Ks. 67219

DO NOT USE THIS SPACE.
THIS FREIGHT BILL IS DESIGNED TO MEET THE REQUIREMENTS OF THE INTERSTATE COMMERCE COMMISSION AND THE FREIGHT CHARGES MUST BE PAID AS REQUIRED BY SECTION 223 OF PART VI OF THE INTERSTATE COMMERCE ACT.

CONN. LINE

Cantral Frt. Lines 51334743-5

SHIPPER'S NO.

NO. PIECES	DESCRIPTION OF ARTICLES AND SPECIAL MARKS	WEIGHT	RATE	TOTAL CHARGES
1	Tube Hydraulic Steel Tubing	150	M	62.00 Coll
	9460			
	100149000			

9-21-94

RECEIVED SEP 19 1994

ORIGIN	$	
SUP. EXP.	$ 31.00	
BEYOND*	$ 31.00	

RECEIVED THE ABOVE DESCRIBED PROPERTY IN GOOD CONDITION EXCEPT AS NOTED.

FIRM

BY

DATE DELIVERED

TIME DELIVERED A. M. P. M.

DRIVER Gary

ICC-MC 16479
10633-MC-CR

ORIGINAL FREIGHT BILL

NOT RESPONSIBLE FOR CONCEALED DAMAGES REPORTED LATER THAN FIFTEEN (15) DAYS AFTER DELIVERY.

INS DKG

PAGE: 1

NO: 041576

DATE: 08/04/94

SHIP VIA: UPS NDA

FOB:

TERMS: NET 30

CUSTOMER CODE: 021037380

SPRAY Service Center

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

BILL TO: KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

0001
SHIP TO: KNAPHEIDE MFG. CO.
1701 NO. 16TH ST.
QUINCY IL, 62301

13233

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
314	07/25/94	123 - DENNIS	025243 02

QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
2	2	1 0	SR-3405 FAN STACK RING		67.60	135.20
	2	2 0	SR-1705 FAN STACK RING		52.00	104.00
			NO SHIPPING CHARGES			
			PER DENNIS STOVER			
			9460			
			100149002			
			9.99			
			IF YOU NEED A STATEMENT PLEASE ADVISE.		TOTAL:	239.20

MIT TO: P.O. Box 11525 • Wichita, Kansas 67202

TENK BROS. CONSTRUCTION
520 Spring St.
QUINCY, ILLINOIS 62301

DATE 10-1-94
NUMBER

Phone 222-3361

11772

Knapheide Mfg. Co
P.O. Box C-140
Quincy,.Il. 62306-2140

TERMS:

PLEASE DETACH AND RETURN WITH YOUR REMITTANCE $

DATE	CHARGES AND CREDITS	BALANCE
	P.O. # 120306 BALANCE FORWARD	
	For 2 ~~Paint~~ booth pits. See	
	material and labor record. attached.	$1,798.00
	D-1	
	project # 9460	
	100149007	
	11-94	

Thank You

PAY LAST AMOUNT IN THIS COLUMN

TENK BROS. CONSTRUCTION

PAGE: 1

INS: RDS

SPRAY & Service Center

NO: 042402

DATE: 08/17/94

SHIP VIA: UPS

FOB:

TERMS: NET 30

CUSTOMER CODE: 021037380

8115 "H" Street
Omaha, NE. 68127
402-339-0330
FAX 402-339-0418

311 Pattie
Wichita, Kansas 67211
P.O. Box 11525 • Wichita, Kansas 67202
316-264-4349
FAX 316-264-5250

240-B So. Union St.
Springfield, Mo. 65802
417-831-1452
FAX 417-831-0855

BILL TO: KNAPHEIDE MFG. COMPANY
436 SOUTH SIXTH STREET
PO BOX C140
QUINCY, ILLINOIS 62306

SHIP TO: TEMP
KNAPHEIDE MFG. CO.
ATTN. BUTCH EARL
1701 NO. 16TH ST.
QUINCY, IL 62301

P/C

13233

PURCHASE ORDER NO.	ORDER DATE	SALES PERSON	OUR ORDER NO.
032 120332	08/15/94	123 - DENNIS	026242 02

QUANTITY Ordered	Shipped	B.O.	DESCRIPTION	DISCOUNT	UNIT PRICE	EXTENDED PRICE
6	6	1 0	222-607 GRACO FINE FINISH AIR CAP 217-292 AA GUN		42.50	255.00
6	6	2 0	182-514 GRACO AIR ASSISTED AIRLESS TIP (.014) 10-11 " FAN PATTERN		51.00	306.00
4	4	3 0	FN94 BINKS HIGH VOLUME LOW PRESSURE		38.25	153.00

9440

10149000

Jte 10.94

no, tax note

FREIGHT: 3.79
SALES TAX: 42.66
TOTAL: 760.45

IF YOU NEED A STATEMENT PLEASE ADVISE.

EMIT TO: P.O. Box 11525 • Wichita, Kansas 67202

717.79

Clarklift of Quincy, Inc.

REMIT TO: 2426 West Schneidman Drive, Quincy, IL 62301
2426 West Schneidman Drive, Quincy, IL 62301
(217) 224-6600

INVOICE NUMBER
QRI018540
INVOICE DATE
08/24/1994

2064.00 10362 PAGE 1

SOLD TO:

KNAPHEIDE MANUFACTURING CO.
P.O. BOX C-140

QUINCY IL 62306

SHIP TO:

KNAPHEIDE MANUFACTURING CO.
OLD SPEEDRACK BUILDING
NORTH 16TH STREET5
QUINCY IL 62306

120321

Customer Order No.	Date	Ship Via	Terms	SO Number	Date
[illegible]	/ /	DELIVERED	Net 10 Days	1185	08/15/1994

Make	Model	Serial Number	Control No.	Customer's Unit Numbers	Hour Meter
NDIT	2546	2546820910	7864		

Quantity	DESCRIPTION	Unit Price	Extension
	RENTAL OF 2546 BANDIT S/N 2546820910 FOR ONE WEEK @ $325.00 PER WEEK & TWO DAYS @ $65.00 PER DAY PRORATED TO THE WEEKLY RATE - FROM 8-5-94 TO 8-15-94 DELIVERY & PICK UP CHARGES		
1	WEEK(S) SHORT TERM RENTAL (1)=1	325.00	325.00
2	DAY(S) SHORT TERM RENTAL	65.00	130.00
2	LABOR DRIVER	39.00	78.00
	Order Gross Amount		533.00
	Invoice Net Amount		533.00

9460
100149000

[illegible]

voided per Dla

9-12-94 [illegible]

ENTERED AUG 9 1994

9.94

11 LEATHERS

Pay This Amount → 533.00

CLAIMS MUST BE MADE IMMEDIATELY UPON RECEIPT OF GOODS. Goods or services covered by this invoice were produced in compliance the Fair labor Standards Act of 1938 as amended. RETURNED PARTS MUST BE PREPAID.
goods accepted for credit unless returned with this invoice within 15 days. 15% restocking charge on all returned parts.
REFUNDS ON ELECTRICAL OR SPECIAL ORDER PARTS.

INVOICE

RICHARDS ELECTRIC MOTOR CO.

426 STATE STREET QUINCY, ILLINOIS 62301
AREA 217 • 222-7154 or 222-7162

EASA

SOLD TO:
KNAPHEIDE MANUFACTURING
436 SO. 6TH STREET
P.O. BOX C 140
QUINCY IL 62306-2140

11543

Complete Motor Service
REWINDING — NEW MOTORS — BELTS
CONTROLS - PULLEYS-GEAR REDUCERS

SHIP TO:

CUSTOMER ORDER NO.	SOLD BY	CUST. NO.	SHIP VIA	DATE	INVOICE NO.
424320 line 2		00208		11/29/94	S73117A

QUAN.	DESCRIPTION	CODE	LIST	UNIT PRICE	AMOUNT
	PAINT BOOTH EXTRAS.	0450		LABOR	420.00
	INSTALLED RELEASE SOLENOIDS	0152		PARTS	61.25
	ON PAINT PUMPS, COMPLETE DOOR	0171		FREIGHT	0.28
	INTERLOCKS.	0554		PARTS	19.33
	FINAL BILLING.				
				SUBTOTAL	500.86
				IL 7.00%	4.31
				TOTAL	505.17

#9460

100149000

JH 12.94

TERMS: ALL ACCOUNTS DUE 10TH OF MONTH FOLLOWING DATE OF PURCHASE. IF NOT PAID WITHIN THIS PERIOD, CREDIT ARRANGEMENTS MUST BE MADE WITH OUR OFFICE.

NET

WE APPRECIATE YOUR BUSINESS

Central Steel & Wire Company

ORIGINAL INVOICE

DATE ENTERED	CUSTOMER'S ORDER	DATE SHIPPED	CUSTOMER CODE	SALESMAN	STATISTICAL CODE	INVOICE DATE	INVOICE NUMBER
07-18-94	423676	07-20-94	28727	028	1.10013	07-20-94	361921

HOW SHIPPED: OUR TRUCK UNLESS OTHERWISE SHOWN

TERMS: CODE 1 - 1/2% 10 DAYS, NET 30 CODE 3 - 1% 10 DAYS, NET 30 CODE 5 - 2% 10 DAYS, NET 45
CODE 2 - 3/4% 10 DAYS, NET 30 CODE 4 - 2% 10 DAYS, NET 30 CODE 6 - NET 30 DAYS

PING WEIGHT
EE INVOICE

361921

OUR ORDER NUMB

36192

217) 222-7

SOLD TO

KNAPHEIDE MFG CO

P O. BOX C140
QUINCY, IL 62306-2140

10308

SHIP TO (SAME UNLESS SHOWN)

ATTN: DICK WHICKER
1401 N 16TH ST

SHIPPED FROM CHICAGO PLANT
PHONE (312) 471-3800

WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTIONS 6, 7, AND 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED AND OF REGULATIONS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR ISSUED UNDER SECTION 14 THEREOF.

ALL SALES SUBJECT TO TERMS AND CONDITIONS IN OUR STOCK LIST AND ON REVERSE SIDE

QTY ORDERED	SIZE AND DESCRIPTION	TERMS	QTY SHIPPED	PRICE	AMOUNT
7PC	19W2 STEEL GRATING WELDED 2-1/4" X 3/16" BEARING BARS 24 " X 48" SMOOTH UNPAINTED UNBANDED	1 1	56 SF 952 #	18.97 U	1062.32
				TOTAL DELIVERED	***1062.32
	DISCOUNT ALLOWABLE ONLY ON METAL $5.31	IF PAID WITHIN TERMS STATED ABOVE			

#9460
100149000

ENTERED JUL 27 1994

7.94

SUBJECT
CONDITIONS
K LIST
ERSE SIDE

FORM C-170-F R02/18/91

REMITTANCES TO CHICAGO OFFICE P.O. BOX 5190, CHICAGO, ILLINOIS 60680-5100

Weather-Rite Inc.
[illegible] North Fifth Street
Minneapolis, MN 55401
Phone: (612) 338-1401

PLEASE REMIT TO ▶ [illegible]EATHER-RITE, INC.
[illegible]S N. FIFTH STREET
MINNEAPOLIS MN 55401

ORIGINAL INVOICE

[illegible]CE NUM[illegible]
THIS NUMBER
1-245975

SHIPPED	SHIPPED VIA	F.O.B.	CUSTOMER ORDER NO.	TERMS	INVOICE DATE	INVOICE NO.
/05/94	CCX	ORIGIN		NET 30 DAYS	12/05/94	025486-00

(Same Address As Sold To – Unless Indicated Below)

SOLD TO
KNAPHEIDE MFG
1701 N 16TH STREET
QUINCY IL 62301

14264

SHIP TO
KNAPHEIDE MFG
1701 N 16TH STREET
QUINCY IL 62301

QUANTITY ORDERED	B/O	SHIPPED	DESCRIPTION	PART NUMBER	PRODUCT CODE	JOB NUMBER	UNIT PRICE	AMOUNT
1	0	1	FOR UNIT SHIPPED 8/5/94	*FRT CHARGES			.00	.00

9460
100149000

OK to pay?
code?
Rub

Approx
fund air

over

12.94

WATERED DEC 2 0 1994

FREIGHT CHGS 223.50
TOTAL INVOICE 223.50

*** CLOSED ORDER ***

[illegible]ES ORDER NO.	CO.	CUSTOMER NO.	CITY	STATE	SALESMAN	TERRITORY	DISTRIBUTOR	DUNS. NO.
25486-00	03	10375						

INTERNAL LABOR & MATERIALS!

LABOR: (JOURNAL ENTRIES)

JULY	1,948.78	
AUGUST	6,567.53	
SEPTEMBER	735.31	
		9,251.62

MATERIAL: (JOURNAL ENTRIES)

JULY	1,696.51	
AUGUST	181.00	
	524.54	
		2,402.05

TOTAL $ 11,653.67

Gary Kal

INVOICE

SOCIETY OF MANUFACTURING ENGINEERS

ADDRESS INQUIRIES TO:

420167

ONE SME DRIVE P.O. BOX 930 DEARBORN, MI 48121

3-18-94 due

AREA CODE 313-271-1500

INVOICE NO. 627637

CUSTOMER P.O. NUMBER 420167

116.95

DATE 02-22-94

DESCRIPTION	SME CODES	AMOUNT
PAINT TECHNOLOGY: CLEANING & PAINTING METAL MANUFACTURED PARTS - JANUARY 27-28, 1994 18 TOTAL ATTENDEES BASE FEE FOR 15 PARTICIPANTS $4275.00 PLUS 3 ADDL AT $65/EA 195.00 INSTRUCTOR'S TRAVEL EXPENSE 740.12 TOTAL FEE DUE $5210.12 ANY QUESTIONS CONTACT ROSE CIPRIANO	26422/6107	5210.12CR
ENTERED MAR 21 1994 640960522 per JK 1382.33		
	AMOUNT DUE	$ 5210.12

TERMS:
PLEASE INCLUDE INVOICE NUMBER WITH YOUR PAYMENT

SME CODES: 5,210.12 AR 99999/1341

BILL TO:
GERRY KORB
VICE PRESIDENT OPERATIONS
KNAPHEIDE MANUFACTURING CO
436 SOUTH SIXTH STREET
QUINCY IL 62306-2140

SHIP TO: (SAME AS SOLD TO UNLESS OTHERWISE INDICATED)

OK to pay Gerry 2/25/94

RETAIN THIS PORTION FOR YOUR RECORDS
DETACH THIS PORTION AND RETURN WITH YOUR REMITTANCE

SOCIETY OF MANUFACTURING ENGINEERS

REMIT TO:

P.O. BOX 77058 DETROIT, MI 48277

INVOICE NO. 627637

CUSTOMER P.O. NUMBER

DATE 02-22-94

AMOUNT DUE $ 5210.12

BILL TO:
GERRY KORB
VICE PRESIDENT OPERATIONS
KNAPHEIDE MANUFACTURING CO
436 SOUTH SIXTH STREET
QUINCY IL 62306-2140

00521012 6276377

RAUX

TRAVEL EXPENSE REPORT

SOCIETY OF MANUFACTURING ENGINEERS
ONE SME DRIVE, P.O. BOX 930
DEARBORN, MICHIGAN 48121

NAME ROBERT J. [illegible]
ADDRESS 1031 REGAN LANE
SPRINGFIELD, OHIO 45503
SOCIETY TITLE CHAIRMAN AFP/SME

REIMBURSEMENT DATE 1-31-94
PURPOSE OF TRAVEL/EXPENSE INSTRUCTOR - PAINT TECH. CLEANING & PAINTING MF&D. PARTS COURSE
EXPENSE REIMBURSEMENT
CHARGE TO COST CENTER 26472
EMPLOYEE PERSONAL #

																				TOTALS	
	ENTER DATES	1-26-94		1-27-94		1-28-94															
ITINERARY	ORIGIN	SPFLD, OHIO				DAYTON, OHIO															
	DESTINATION	DAYTON, OHIO		QUINCY, IL		SPFLD, OHIO															
	DAILY MILEAGE	32				32														17	92
Mileage @ .28		8	96			8	96													572	42
Air Fare		572	42																	9	75
Parking and Tolls						9	75													123	53
Taxi and Bus Fares						123	53	(AUTO RENTAL)													
Lodging		PROVIDED		PROVIDED		—															
Tips and Baggage																					
Telephone & Telegraph																					
Other (Explain below)																					
1																					
2																					
TOTAL TRAVEL		581	38	—		142	24													723	62
Meals—Breakfast	—Including Tip	—		PROVIDED		PROVIDED															
—Lunch	—Including Tip	—		PROVIDED		PROVIDED															
—Dinner	—Including Tip	9	50	PROVIDED		7	00														
Guests: Explain on Reverse Side																				16	50
MEALS & GUESTS TOTAL		9	50	—		7	00													740	12
GRAND TOTAL		590	88	—		149	24														

I hereby certify that all expenses claimed above were incurred on official SME business and I am not accepting reimbursement for these expenses from more than one party.

SIGNATURE Robert J. Drazer
STAFF APPROVAL Mike T. Cipriano
STAFF APPROVAL
ADMINISTRATIVE REVIEW:
BY 2/9
BY

Less Charges (Reverse Side) —
Amount applied to advance account: —
~~VO #~~
Less Donation to SME Education Foundation —
Due to SME —
Balance Due Payee 740.12

Currency
Exchange Rate: $

HEADQUARTERS USE ONLY

Accounting Distribution

Account Number	Amount	
MEALS -7193		
6422-7397	740	12
6422-7249	(600	00)
(210)		

ACCOUNTING REVIEW:
By

NOTE: Completed Travel Expense Reports must be submitted to the appropriate Staff Member for approval **within 60 days** from the date of travel.
All SME travel **must include a brief trip report**, except in the case of meetings or travel where minutes will be produced and distributed following the meeting.
Expense Reports not complying with these policies will not be reimbursed.

EXPENSES ON FRONT OF FORM, EXPLAIN ON THE REVERSE SIDE AND

STATEMENT

DAYS INN
200 Maine
Quincy, IL 62301

13572
IW

DATE 2/2/94

TO Knapheide Manufacturing
POB C-140
Quincy, Il. 62306-2140

DETACH AND RETURN UPPER PORTION WITH YOUR REMITTANCE $ 356.81

Charges from 1/27/94	$ 173.55
Charges from 1/28/94	183.26
	$ 356.81

ENTERED FEB 16 1994

Please see attached checks.

Thank you for choosing Days Inn!!!!!

648970100

Gerry
2/4/94
CCU-640

TOPS FORM 3809
LITHO IN U.S.A.

YOUR CHECK IS YOUR RECEIPT

STATEMENT

13572 25152

DAYS INN
200 Maine
Quincy, IL 62301

DATE January 30, 1994

mbg

TO Knapheide ~~Equipment Company~~
2431 North Fifth
Quincy, Il. 62301

DETACH AND RETURN UPPER PORTION WITH YOUR REMITTANCE $ 77.70

Overnight lodging for Robert Grear at $35.00 plus tax for 1/26 & 1/27/94	$ 77 70
Total Amount Due	$ 77 70

ENTERED FEB 14 1994

Gerry
Consulting/Education
CCH 640 960522

TOPS FORM 3809
LITHO IN U.S.A.

YOUR CHECK IS YOUR RECEIPT

Robert D. Grear, CMfgE, CM
Consultant to the Finishing Industry

2-16-94 12

13979

Pd # 420905

INVOICE FOR CONSULTATION SERVICES

For services rendered in your Quincy, Illinois operations for improving finishing performance, reducing costs, and concepting a new plant/paint facility.

Round trip air fare from Columbus, Ohio to St. Louis, Missouri		$ 94.00
Auto rental, fuel, and insurance		$ 112.00
Hotel for 2 nights		$ 113.22
Food for dinner - 2-10-94 & 2-11-94	640 960502	$ 15.81
Personal car mileage for round trip from Springfield, Ohio to Columbus, Ohio airport. 110 miles @ $.28 mile		$ 30.80
Airport parking fee	ENTERED FEB 23 1994	$ 16.50
2-10-94	One day's consultation fee	$ 500.00
2-11-94	One day's consultation fee	$ 500.00
	Total consulting fees and expenses	$1.382.33

TO: Knapheide Mfg. Co.
P.O. Box C-140
436 South Sixth
Quincy, Illinois 62306-2140

Gerry (640)

DUE AND PAYABLE UPON RECEIPT.

THANK YOU FOR THE OPPORTUNITY TO SERVE!

Robert D. Grear

640960502

Robert D. Grear

Tax I.D. #288-26-8132

1031 Regan Lane • Springfield, Ohio 45503 • (513) 399-9400

Guest Account

Holiday Inn

10795

oom	Rate	Arrival	Depart	Folio No.	Account	Affilliation	PF	ID	Page
025	.00	02/10/94	02/11/94	365	3-DKNAP	8 HOUS	21	ENC	1

DBILL RESTAURANT
XXX
XXX
XXX XX XX

Date	Code	Reference	ID	Description	Charges	Payments	Balance
0210	211		ENC	FRANCO'S BKFST	8.97	.00	8.97
TOTAL						$	8.97

640 970100

ENTERED FEB 17 1994

Gerry
640

I AGREE THAT MY LIABILITY FOR THIS BILL IS NOT WAIVED AND AGREE TO BE HELD PERSONALLY LIABLE IN THE EVENT THAT THE INDICATED PERSON, COMPANY OR ASSOCIATION FAILS TO PAY THE FULL AMOUNT OF THESE CHARGES.

GUEST SIGNATURE

HOLIDAY INN - QUINCY
201 S. Third Street
Quincy, Illinois 62301
217/222-2666 FAX 217/222-3238

Robert D. Grear, CMfgE, CM
Consultant to the Finishing Industry

3-16-94

13979

INVOICE FOR CONSULTATION SERVICES

For services rendered in your Quincy, Illinois operations for improving finishing performance and reducing V.O.C's.

Round trip air fare from Columbus, Ohio to St. Louis, Missouri.		$ 76.21
Auto rental, insurance, and fuel		$ 103.58
Food for dinner 3-13-94 and 3-14-94		$ 20.25
Airport parking fee		$ 16.50
Personal car mileage for round trip from Springfield, Ohio to Columbus, Ohio airport. 110 miles @ $.28 mile		$ 30.80
3-14-94	One day's consultation fee	$ 500.00
3015-94	One day's consultation fee	$ 500.00
	Total consulting fees and expenses	$ 1,247.34

ENTERED MAR 30 1994

TO: Knapheide Mfg. Co.
P.O. Box C-140
436 South Sixth
Quincy, Illinois 62306-2140

OK
Gary

DUE AND PAYABLE UPON RECEIPT.

THANK YOU FOR THE OPPORTUNITY TO SERVE!

Robert D. Grear

Robert D. Grear

Tax I.D. #288-26-8132

640 960502
per DK

1031 Regan Lane • Springfield, Ohio 45503 • (513) 399-9400

Guest Account

Holiday Inn

A

Room	Rate	Arrival	Depart	Folio No.	Account	Affilliation	PF	ID	Page
305	51.00	03/13/94	03/15/94	2824	3-DKNAP	3 KNAP	11	JED	1

R GREAR
1031 REGAN LN

SPRINGFIELD OH 455031911

IW

10795

Date	Code	Reference	ID	Description	Charges	Payments	Balance
0313	113		JED	VOLUME ROOM	51.00	.00	51.00
0313	811		JED	SALES TAX	3.57	.00	54.57
0313	812		JED	OCCUPANCY TAX	2.04	.00	56.61
0314	113		JED	VOLUME ROOM	51.00	.00	107.61
0314	811		JED	SALES TAX	3.57	.00	111.18
0314	812		JED	OCCUPANCY TAX	2.04	.00	113.22

TOTAL $ 113.22

+ 10.76 ATTACHED

124.-

6409605 02
per Kab

ENTERED MAR 2 9 1994

I AGREE THAT MY LIABILITY FOR THIS BILL IS NOT WAIVED AND AGREE TO BE HELD PERSONALLY LIABLE IN THE EVENT THAT THE INDICATED PERSON, COMPANY OR ASSOCIATION FAILS TO PAY THE FULL AMOUNT OF THESE CHARGES.

Robert D. Grear
GUEST SIGNATURE

HOLIDAY INN - QUINCY
201 S. Third Street
Quincy, Illinois 62301
217/222-2666 FAX 217/222-3238

Holiday Inn

10795

Franco's

0 1 5 9 5 2 4

TBL (3)

R94-022030 RATS. 4,259,569, D-281,607

15952

SERV.	PERS.	LOC.	TBLE.	TIME	DATE	CHK. NO.
12	2	1	15	07:10	03/14/94	159524

ITEMS	
1	
2	
3	
4	
5	
6	
7	
8	
9	Speak
10	
11	Nit tea
12	
13	
14	
15	
16	
17	

FIT/TRIM 3.95
DIETERS 3.95
TEA .75
TAX .61
03/14 0113 BRKFAST 9.26

CHECK 159524 SETTLED
ADD CHK 9.26
CHRG TIP 1.50
TAX .00
CHEK TL 10.76
DIRECT BILL 10.76
FOLIO # 248027 POSTED
RM 7909 DI
TITLEDG 159524
07:5 03/14/94 NZ 6142

W/ WB/ CB

- fit tim. -OB-gf

Gerry Kob
KNAPHEIDE MFG.

ENTERED MAR 2 9 1994

Franco's

HOLIDAY INN - QUINCY
201 S. THIRD STREET
QUINCY, ILLINOIS 62301
(217) 222-2666

REFERENCE NUMBER 15952

DATE SERVER

AMOUNT 10.76

640960 50
per GKob

Gerry Kob

Robert D. Grear, CMfgE, CM
Consultant to the Finishing Industry

5-2-94

IN

13979

INVOICE FOR CONSULTATION SERVICES

PO# 422642

For services rendered in your Quincy, Illinois operations for improving finishing performance and reducing V.O.C's.

Two round trip air fares from Columbus, Ohio to St. Louis, Missouri for Messrs. Grear and Litterst.		$ 168.00
Auto rental, insurance, and fuel.		$ 116.37
Airport parking fee		$ 16.50
Personal car mileage for round trip from Springfield, Ohio to Columbus, Ohio airport. 110 miles @ $.28 mile.		$ 30.80
4-25-94	One day's consultation fee	$ 500.00
4-26-94	One day's consultation fee	$ 500.00
	Total consulting fees and expenses	$1,331.67

ENTERED MAY 18 1994

TO: Knapheide Mfg. Co.
P.O. Box C-140
436 South Sixth
Quincy, Illinois 62306-2140

G Korb
640 - Consulting

DUE AND PAYABLE UPON RECEIPT.

THANK YOU FOR THE OPPORTUNITY TO SERVE!

640960502

Please do PO
I need back to
pay Singley

Robert D. Grear

Robert D. Grear

Tax. I.D. #288-26-8132

1031 Regan Lane • Springfield, Ohio 45503 • (513) 399-9400

Guest Account

Holiday Inn

10795

Room	Rate	Arrival	Depart	Folio No.	Account	Affilliation	PF	ID	Page
301	51.00	04/24/94	04/26/94	6113	3-DKNAP	3 KNAP	11	JNM	1

WHITIE LITTERE
KNAPHEIDE

QUINCY IL 62301

Date	Code	Reference	ID	Description	Charges	Payments	Balance
0424	113		JNM	VOLUME ROOM	51.00	.00	51.00
0424	811		JNM	SALES TAX	3.57	.00	54.57
0424	812		JNM	OCCUPANCY TAX	2.04	.00	56.61
0425	113		JNM	VOLUME ROOM	51.00	.00	107.61
0425	811		JNM	SALES TAX	3.57	.00	111.18
0425	812		JNM	OCCUPANCY TAX	2.04	.00	113.22

TOTAL $ 113.22

+ 148.38 (ATTACHED)
+ 13.98

276.

OK per GK

640960 502

ENTERED MAY 3 1994

I AGREE THAT MY LIABILITY FOR THIS BILL IS NOT WAIVED AND AGREE TO BE HELD PERSONALLY LIABLE IN THE EVENT THAT THE INDICATED PERSON, COMPANY OR ASSOCIATION FAILS TO PAY THE FULL AMOUNT OF THESE CHARGES.

GUEST SIGNATURE

HOLIDAY INN - QUINCY
201 S. Third Street
Quincy, Illinois 62301
217/222-2666 FAX 217/222-3238

Guest Account

Holiday Inn

10795

Room	Rate	Arrival	Depart	Folio No.	Account	Affilliation	PF	ID	Page
300	51.00	04/24/94	04/24/94	6112	3-DKNAF	3 KNAF	11	JNM	1

R GREAR
1021 REGAN LN

SPRINGFIELD OH 455031911

Date	Code	Reference	ID	Description	Charges	Payments	Balance
0424	113		JNM	VOLUME ROOM	51.00	.00	51.00
0424	811		JNM	SALES TAX	3.57	.00	54.57
0424	812		JNM	OCCUPANCY TAX	2.04	.00	56.61
0425	213	21839	ERK	FRANCO'S DINNE	35.16	.00	91.77
0425	113		JNM	VOLUME ROOM	51.00	.00	142.77
0425	811		JNM	SALES TAX	3.57	.00	146.34
0425	812		JNM	OCCUPANCY TAX	2.04	.00	148.38

TOTAL $ 148.38

640960502

OK per GK

ENTERED MAY 3 1994

I AGREE THAT MY LIABILITY FOR THIS BILL IS NOT WAIVED AND AGREE TO BE HELD PERSONALLY LIABLE IN THE EVENT THAT THE INDICATED PERSON, COMPANY OR ASSOCIATION FAILS TO PAY THE FULL AMOUNT OF THESE CHARGES.

Robert A. Grear
GUEST SIGNATURE

HOLIDAY INN - QUINCY
201 S. Third Street
Quincy, Illinois 62301
217/222-2666 FAX 217/222-3238

Guest Account

Holiday Inn

10795

Room	Rate	Arrival	Depart	Folio No.	Account	Affilliation	PF	ID	Page
9020	.00	04/26/94	04/27/94	6174	3-DKNAP	8 HOUS	11	JED	1

MFG KNAPHEIDE
GERRY KALB
XX
XX XX 0000

DW
21954

Date	Code	Reference	ID	Description	Charges	Payments	Balance
0426	211	219543	JED	FRANCO'S BKFST	13.98	.00	13.98
TOTAL							$ 13.98

64096052 OK per DK

ENTERED MAY 3 1994

I AGREE THAT MY LIABILITY FOR THIS BILL IS NOT WAIVED AND AGREE TO BE HELD PERSONALLY LIABLE IN THE EVENT THAT THE INDICATED PERSON, COMPANY OR ASSOCIATION FAILS TO PAY THE FULL AMOUNT OF THESE CHARGES.

GUEST SIGNATURE

HOLIDAY INN - QUINCY
201 S. Third Street
Quincy, Illinois 62301
217/222-2666 FAX 217/222-3238

201 S. THIRD STREET
QUINCY, ILLINOIS 62301
(217) 222-2666

AMOUNT 13.98

.25
.50
.95
.75
.75
.00
.78
3
1.98
2.00
.00
8
19543
732
76

APRIL 28 & 29 - E-COAT TNG
@ BASF

LODGING & MEALS:

JIM BARNETT	91.52
HAROLD HUGGINS	67.22
KEITH NORRIS	64.33
JON WREN	69.93
JOHN BAIRD	61.28
JOHN EVANS	65.68
	420.00

JIM BARNETT TRAVEL $141.00

APHEIDE
INCE 1848

2494
5283

Name Jim Bant
Expenses Week Of 4-24-94 a 4-30-94
Department 640
Todays Date 5-2-94

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
(Date			4-25-94		4-26-94		4-27-94		4-28-94		4-29-94			
(From			Quincy Ill						Chicago Ill		Detroit MI			
(To			Chicago Ill						Detroit M.I.		St Louis MO.			
(To											Quincy Ill			
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
& Entertainment:														
eakfast			5 23		– –				5 19		– –			
nch			– –		8 76		8 76		– –		– –			
nner			– –		14 29		12 63		– –		9 77			
tertainment														
tertainment														
tertainment														
(Explain on Back)														
iscellaneous			5 00		7 50		– –		– –		5 00			
Meals & Entertainment			10 23		30 55		21 39		5 19		14 77			

62.17

WEEKLY TOTAL MEALS & ENTERTAINMENT

Paid by Employee	Charged the Company
82.13	

& Lodging Expense:

ansportation:														
Air														
Train or Bus														
Taxi or Limo														
Auto Miles Driven											24 @ 22¢			
Miles x Current Rate											5 28			
Gasoline Expense														
Other Auto Expense														
Auto Rental Expense														
odging			107 52		107 52		107 52		61 28					
ostage, Telephone														
ervice Gratuity			5 00		4 00		3 00		3 00		2 00			
iscellaneous			3 00											
otal Travel & Lodging			115 52		111 52		110 52		64 28		7 28			
D TOTAL ALL EXPENSES			125 75		142 07		131 91		69 47		22 05			

3 days = Powder Seminar

91.52

Balance Forward	610 59
Advance to Employee	– –
Actual Paid by Employee	491 25
Due Employee (Knapheide)	119 34

399.73

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	82 13		
Total Travel & Lodging	409 12		
Automobile Rental	– –		
Grand Total	491 25		

Approved a) [signature]
b) Gerry

Date a) 5-2-94 b) 5/3/94

MW 5/2/94

7010 82.13
7020 403.84
KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS

7030 5.28

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

Paint & Powder Expo
B.A.S.F. E Coat School

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

VENDOR IND PAINT POWDER EXPO 94 | CHECK DATE 3/04/94 | CHECK NO. 051348

INVOICE DATE	INVOICE NO. / DESCRIPTION	INVOICE AMOUNT	DISCOUNT	NET AMOUNT
3/02/94	3-4-94 REG FEE BARNETT	235.00	.00	235.00
	TOTALS ▶	235.00	.00	235.00

THE KNAPHEIDE MFG. CO.
6 SOUTH SIXTH STREET, P.O. BOX C140, QUINCY, ILLINOIS 62306 ■ 217-222-7131

KNAPHEIDE ®
SINCE 1848

THE KNAPHEIDE MFG. CO.
436 SOUTH SIXTH STREET
P.O. BOX C140
QUINCY, ILLINOIS 62306
217-222-7131

MERCANTILE TRUST & SAVINGS BANK
QUINCY, ILLINOIS

70-53/812

CHECK NO. 051348 05134

DATE	AMOUNT
3/04/94	****235.00

VOID AFTER 90 DAY

PAY TWO HUNDRED THIRTY-FIVE DOLLARS ONLY

VENDOR NO. 13996

TO THE ORDER OF

IND PAINT POWDER EXPO 94
191 SOUTH GARY AVENUE
CAROL STREAM IL 601882092

THE KNAPHEIDE MFG. CO.

NOT NEGOTIABLE

⑈051348⑈ ⑆081200531⑆ 2⑈0⑈891⑈4⑈

KNAPHEIDE MFG. CO.

CHECK REQUEST

DUE DATE: 3-4-94 DATE 3-2-94

REQUESTED BY: Jim Barnett

VENDOR #: 13994 INVOICE # 3-4.94

VENDOR Industrial Paint & Powder Expo '94
191 South Gary Avenue
Carol Stream, Illinois 60188-2092

P.O.# _____ (WHEN APPLICABLE)

ENTERED MAR - 3 1994

DESCRIPTION: Registration fees for Expo & Conference.

ACCOUNT CODING	AMOUNT
960522-644	235.00

COMMENTS: Please enclose check in attached envelope and place in U.S. mail. Thank you!

INDUSTRIAL EXPO PAINT & POWDER

ADVANCE REGISTRATION FORM

Register Early! Advance Registrations Must Be Received by Monday, April 11, 1994.

To Register for Exhibits-Only, complete Sections A and B.
To Register for Exhibits, Tutorial, and/or Conference Program, **Complete Entire Form.**

A

PLEASE TYPE OR PRINT CLEARLY.

Restrictions: No person under the age of 18 will be admitted.

FIRST NAME: Jim
LAST NAME: Barnett
TITLE: M.E. Manager
COMPANY: Knapheide Mfg. Co.
ADDRESS: 436 S. Sixth P.O. Box C140
CITY: Quincy
STATE: IL ZIP / POSTAL CODE: 62306-2140 COUNTRY:
TELEPHONE (AREA CODE): 217-222-7131 FAX (AREA CODE): 217-222-5939

You may photocopy this form for additional registrants.

Outside U.S. and Canada please include country and city codes.

B

My Primary Job Function (check one only):

- A ☐ Company Management
- B ☐ Production
- C ☑ Engineering
- D ☐ Product Design
- E ☐ Research/Development
- F ☐ Metallurgy and Chemistry
- G ☐ Environmental Control
- H ☐ Quality Control/Reliability
- J ☐ Sales/Marketing

I Influence and/or specify the purchase of (check all that apply):

- K ☑ Paint & Powder Coatings
- L ☐ Raw Materials for the Manufacture of Coatings
- M ☑ Turnkey Finishing Systems
- N ☑ Spray Painting Equipment
- P ☑ Paint Manufacturing Equipment
- Q ☑ Paint Additives
- R ☑ Safety Equipment and Supplies
- S ☑ Solvents
- T ☐ Pollution Control Chemicals and Equipment
- U ☑ Electrocoating Materials and Equipment
- V ☑ Powder Coating Materials and Equipment
- W ☑ Pretreatment Chemicals and Equipment
- X ☑ Test and Measurement Equipment
- Y ☑ Tumbling/Vibration/Abrasive Media and Equipment
- Z ☑ Baking and Curing Equipment
- AA ☑ Paint Line Components (Pumps, Filters, Conveyors, etc.)

My Primary Business/Industry is (check one only):

- BB ☐ Aerospace
- CC ☐ Appliance
- DD ☐ Architectural
- EE ☐ Automotive
- FF ☐ Consultant
- GG ☐ Defense
- HH ☐ Distributor of Paint/Powder Coatings, Equipment & Materials
- JJ ☐ Furniture
- KK ☐ Heavy Duty Transportation
- LL ☐ Industrial/Agriculture/Construction Equipment
- MM ☐ Manufacturer of Paint/Powder Coatings, Equipment & Materials
- NN ☐ Marine
- PP ☐ Office Products
- QQ ☐ Sports & Leisure
- RR ☐ Other: Truck Equipment

Number of Employees in my Company (all plants) (check one only):

- SS ☐ Less than 20
- TT ☐ 20 to 49
- UU ☐ 50 to 99
- VV ☐ 100 to 249
- WW ☑ 250 to 499
- XX ☐ 500 to 999
- YY ☐ 1000 to 2500
- ZZ ☐ Over 2500

CIRCLE APPROPRIATE TRACK FOR EACH DAY YOU WILL ATTEND.
Sessions subject to change.

MONDAY	HOURS	TUESDAY	WEDNESDAY	THURSDAY
1 • TUTORIAL Environmental 9 A.M. TO 4 P.M. *INCLUDES LUNCHEON*	8:30 A.M. TO NOON	2 • PAINT / POWDER APPLICATION	4 • PAINT APPLICATION	6 • PAINT APPLICATION
		3 • COATINGS MANUFACTURING SYMPOSIUM	5 • POWDER APPLICATION	7 • POWDER APPLICATION

ADVANCE REGISTRATION FEE SCHEDULE *(SELECT ALL THAT APPLY)*

- ☐ *MASTER PASS™* (Complete 4-day Educational Package — Includes Everything) $435
- ☐ Full-Day Environmental Tutorial & Exhibits (Includes Luncheon) $235

THE FOLLOWING PACKAGES DO NOT INCLUDE ENVIRONMENTAL TUTORIAL.

- ☐ Three days of Conference & Exhibits $300
- ☑ Two days of Conference & Exhibits $235
- ☐ One day of Conference & Exhibits $120

TOTAL ..... $ 235.00

METHOD OF PAYMENT

☑ CHECK ENCLOSED — Make check payable to: Industrial Paint & Powder Expo. Mail check with registration form. FAXes NOT accepted.

☐ PURCHASE ORDER ENCLOSED — U.S. Government and Military Personnel Only! Mail Purchase Order with registration form. FAXes NOT accepted.

☐ CHARGE TO: ☐ Visa ☐ MasterCard ☐ American Express (By Phone, FAX, or Mail.)

Account No.: *(Please include dashes or spaces when providing account number.)*

Expiration Date: ___ / ___ **Account will be billed upon receipt of registration.**

Name on Card: *(Please Print)*

Cardholder's Signature

3 EASY WAYS TO REGISTER

MAIL: Industrial Paint & Powder Expo '94
191 South Gary Avenue
Carol Stream, Illinois U.S.A. 60188-2092

Checks or Purchase Orders cannot be phoned or FAXed!

PHONE: 1-800-323-5155
(1-708-260-9700 outside the U.S. & Canada)

FAX: 1-708-260-0396 Open 24 Hours!

FOR REGISTRATION USE ONLY!

NAPHEIDE
SINCE 1848

10742
5016

Name Harold Hayes
Expenses Week Of 4-26-9

Department Facilities
Todays Date

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
(Date											4-29-94			
(From														
(To														
(To														
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
s & Entertainment:														
Breakfast											5 94			
Lunch														
Dinner														
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous														
Meals & Entertainment											5 94			

	Paid by Employee	Charged the Company
WEEKLY TOTAL MEALS & ENTERTAINMENT	5.94	

ENTERED MAY 3 1994

el & Lodging Expense:

Transportation:														
Air														
Train or Bus														
Taxi or Limo														
Auto Miles Driven														
Miles x Current Rate														
Gasoline Expense														
Other Auto Expense														
Auto Rental Expense														
Lodging											61 28			
Postage, Telephone														
Service Gratuity														
Miscellaneous														
Total Travel & Lodging														
ND TOTAL ALL EXPENSES											67 22			

970100 5.94
70200 61.28
E KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS

Balance Forward	
Advance to Employee	
Actual Paid by Employee	
Due Employee (Knapheide)	67 22

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	5 94		
Total Travel & Lodging	61 28		
Automobile Rental			
Grand Total	67 22		

Approved a) Gerry
b) TM

Date a) 5/2 b) 5/2/94

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount
4-29-94							

Reason for Trip and Other Remarks:

E coast seminar

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

KNAPHEIDE
SINCE 1848

13363
5217

Name KEITH NORRIS
Expenses Week Of 4-24-94

Department MANUFACTURING ENGINEERING
Todays Date 5-3-94

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
(Date					4-28-94	4-29-94	
(From					QUINCY, IL	DETROIT MI	
Travel (To					DETROIT, MI	QUINCY, IL	
(To							

	Sunday Pd By Employ	Sunday Charge The Co.	Monday Pd By Employ	Monday Charge The Co.	Tuesday Pd By Employ	Tuesday Charge The Co.	Wednesday Pd By Employ	Wednesday Charge The Co.	Thursday Pd By Employ	Thursday Charge The Co.	Friday Pd By Employ	Friday Charge The Co.	Saturday Pd By Employ	Saturday Charge The Co.
Meals & Entertainment:														
Breakfast														
Lunch														
Dinner														
Entertainment														
Entertainment														
Entertainment (Explain on Back)														
Miscellaneous														
Total Meals & Entertainment														
Travel & Lodging Expense:														
Transportation:														
Air														
Train or Bus														
Taxi or Limo														
Auto Miles Driven														
Miles x Current Rate														
Gasoline Expense														
Other Auto Expense														
Auto Rental Expense														
Lodging									61 28					
Postage, Telephone									3 05					
Service Gratuity														
Miscellaneous														
Total Travel & Lodging									64 33					
GRAND TOTAL ALL EXPENSES									64 33					

ENTERED MAY 10 1994 ENTERED MAY 10 1994

WEEKLY TOTAL MEALS & ENTERTAINMENT	Paid by Employee	Charged the Company
	-0-	

44 9702W
64.33

THE KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS

Balance Forward	-0-	
Advance to Employee	-0-	
Actual Paid by Employee	64	33
Due Employee (Knapheide)	64	33

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	-0-		
Total Travel & Lodging	64 33		
Automobile Rental	-0-		
Grand Total	64 33	-0-	

Approved a) [signature] b)

Date a) 5-6-94 b)

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

KNAPHEIDE
SINCE 1848

12873
5271

Name Jon Wren
Expenses Week Of 4-25-94
Department 630
Todays Date 5-3-94

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
(Date									4-28		4-29-94			
(From														
(To														
(To														
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
s & Entertainment:														
Breakfast											4 93			
Lunch														
Dinner														
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous Tip											1 00			
Meals & Entertainment											5 93			

Paid by Employee	Charged the Company
5 93	

WEEKLY TOTAL MEALS & ENTERTAINMENT

ENTERED MAY 5 1994

el & Lodging Expense:
Transportation:
Air
Train or Bus
Taxi or Limo
Auto Miles Driven
Miles x Current Rate
Gasoline Expense
Other Auto Expense
Auto Rental Expense
Lodging 64 00
Postage, Telephone
Service Gratuity
Miscellaneous
Total Travel & Lodging 64 00
AND TOTAL ALL EXPENSES 69 93

970140 5.93
970240 64.00

E KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS

Balance Forward	0 0
Advance to Employee	0 0
Actual Paid by Employee	69 93
Due Employee (Knapheide)	69 93

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	5 93		
Total Travel & Lodging	64 00		
Automobile Rental	0 0		
Grand Total	69 93		

Approved a) _____ b) _____

Date a) _____ b) _____

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

E-Coat Paint Systems TRAINING

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

KNAPHEIDE
SINCE 1848

10929
5/26

Name JOHN BAIRD
Expenses Week Of 4-24-
Department 640
Todays Date 5-2-94

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
(Date	4-24-94		4-25-94		4-26-94						4-29-94			
(From	QUINCY				CHICAGO						DETROIT			
vel (To	CHICAGO				QUINCY						QUINCY			
(To														
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
als & Entertainment:														
Breakfast														
Lunch														
Dinner														
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous														
al Meals & Entertainment														

ENTERED MAY 3 1994

WEEKLY TOTAL MEALS & ENTERTAINMENT

Paid by Employee	Charged the Company

vel & Lodging Expense:																
Transportation:																
Air																
Train or Bus																
Taxi or Limo																
Auto Miles Driven	315		43		358											
Miles x Current Rate	69 30		9 46		78 76											
Gasoline Expense																
Other Auto Expense			6 00		6 00											
Auto Rental Expense																
Lodging											61 28					
Postage, Telephone																
Service Gratuity																
Miscellaneous																
Total Travel & Lodging																
RAND TOTAL ALL EXPENSES	69 30		15 46		84 76						61 28					

0970300 15752
0970200 61.28
HE KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS
0960530 12.00

Balance Forward	~~[illegible]~~
Advance to Employee	—
Actual Paid by Employee	230 80
Due Employee (Knapheide)	230 80

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment			
Total Travel & Lodging	230 80		
Automobile Rental			
Grand Total	230 80		

Approved a) John Baird
b) Gary Kent

Date a) 5/2/94 b) 5/2/94
TM 5/2/94

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

TRIP TO CHICAGO FOR QUALITY WORKSHOP AND ATTENDENCE AT QUALITY EXPO INTERNATIONAL

ATTENDENCE AT BASF DIP PAINT SCHOOL

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

KNAPHEIDE
SINCE 1848

10426
5180

Name JOHN EVANS
Expenses Week Of 4-25-94

Department ENGR 881
Todays Date 5-3-94

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
(Date									4-28-94		4-29-94			
(From									QUINCY		DETROIT			
(To									DETROIT		QUINCY			
(To														
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
& Entertainment:														
reakfast														
unch														
inner														
ntertainment														
ntertainment														
ntertainment														
(Explain on Back)														
iscellaneous														
Meals & Entertainment														

	Paid by Employee	Charged the Company

ENTERED MAY 5 1994 WEEKLY TOTAL MEALS & ENTERTAINMENT

& Lodging Expense:														
ransportation:														
Air														
Train or Bus														
Taxi or Limo														
Auto Miles Driven									10		10			
Miles x Current Rate									2 20		2 20			
Gasoline Expense														
Other Auto Expense														
Auto Rental Expense														
odging									61 28					
ostage, Telephone														
ervice Gratuity														
iscellaneous														
otal Travel & Lodging									63 48		2 20			
D TOTAL ALL EXPENSES									63 48		2 20			

970200 61 28
970300 4.40
KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS

Balance Forward	0 0
Advance to Employee	0 0
Actual Paid by Employee	65 68
Due Employee ~~(Knapheide)~~	65 68

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment			
Total Travel & Lodging	65 68		
Automobile Rental			
Grand Total	65 68		

Approved a) Gerry
b) TM

Date a) 5/3/94 b) 5-4-94

ayed May JE 5.24 [illegible]

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

TRIP TO DETROIT FOR BASF SEMINAR ON ELECTROCOAT PAINT SYSTEM

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

DINERS CLUB ACCOUNT ACTIVITY

ACCOUNT: 3883 317500 0009
Name: KNAPHEIDE MFG CO
Billing Date: 04-25-94

Date	Description	Reference Number	Charges and Other Debits	Payments and Credits
	CONTINUED FROM PREVIOUS PAGE			
04-06-94	TRANS WORLD AIRLINES TRAVLR: WHICKER/D TICKET NUM: 0151519925016 DEPARTURE DATE: 04/17/94 QUINCY:T:ST. LOUIS ST. LOUIS:T:DETROIT DETROIT:V:ST. LOUIS ST. LOUIS:V:QUINCY	B4B03013	$223.00	
04-07-94	MARKAIR AIRLINE TRAVLR: LACKEY/J TICKET NUM: 4787749534579 DEPARTURE DATE: 04/15/94 KANSAS CITY:Y:SAN DIEGO SAN DIEGO:M:DENVER DENVER:B:KANSAS CITY	B4E02031	414.00	
04-11-94	TRANS WORLD AIRLINES TRAVLR: BOCKENFELD/J TICKET NUM: 0151520603024 DEPARTURE DATE: 04/25/94 QUINCY:T:ST. LOUIS ST. LOUIS:T:ALBUQUERQUE	B4E01154	156.00	
04-12-94	TRANS WORLD AIRLINES TRAVLR: BOCKENFELD/J TICKET NUM: 0151520603038 DEPARTURE DATE: 04/22/94 DENVER:V:ST. LOUIS ST. LOUIS:V:QUINCY	B4E01157	184.00	
04-14-94	AMERICAN AIRLINES TRAVLR: BARNETT/J TICKET NUM: 0011520603085 DEPARTURE DATE: 04/28/94 CHICAGO:K:DETROIT DETROIT:T:ST. LOUIS ST. LOUIS:T:QUINCY	I4D08825	141.00	

ACCOUNT ACTIVITY CONTINUED ON NEXT PAGE

Paint Specialist

Kenneth E. (Whitey) Litterst

5920 Morris Road
Springfield, Ohio 45502
(513) 399-0444
282 12 3118

May 20, 1994

Mr. Gerry Korb
Vice President Operations
The Knapheide Mfg. Co.
436 S. Sixth St.
Quincy, Ill. 62306-2140

CCU 640
CONSULTING

Gerry
5/20/94

Consulting Fee (5 Days at 125.00 Per Day)	$625.00
Mileage (932 miles at .29 Per mile)	$270.28
Total	$895.28

Thank You

Kenneth E. (Whitey) Litterst
5920 Morris Road
Springfield, Ohio 45502-9244

Guest Account

Holiday Inn

10795

Room	Rate	Arrival	Depart	Folio No.	Account	Affilliation	PF	ID	Page
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			

[illegible] LITTLEST

ENTERED MAY 25 1996

Date	Code	Reference	ID	Description	Charges	Payments	Balance
0515	113		JNM	VOLUME ROOM	53.00	.00	53.00
0515	811		JNM	SALES TAX	3.71	.00	56.71
0515	812		JNM	OCCUPANCY TAX	2.12	.00	58.83
0516	113		JNM	VOLUME ROOM	53.00	.00	111.83
0516	811		JNM	SALES TAX	3.71	.00	115.54
0516	812		JNM	OCCUPANCY TAX	2.12	.00	117.66
0517	113		JNM	VOLUME ROOM	53.00	.00	170.66
0517	811		JNM	SALES TAX	3.71	.00	174.37
0517	812		JNM	OCCUPANCY TAX	2.12	.00	176.49
0518	113		MTD	VOLUME ROOM	53.00	.00	229.49
05[illegible]	811		MTD	SALES TAX	3.71	.00	233.20
[illegible]	812		MTD	OCCUPANCY TAX	2.12	.00	235.32
0519	113		JED	VOLUME ROOM	53.00	.00	288.32
0519	811		JED	SALES TAX	3.71	.00	292.03
0519	812		JED	OCCUPANCY TAX	2.12	.00	294.15
TOTAL						$	294.15

294.15

Please OK + return

Sue

640 Consulting

Gerry

6409660502

I AGREE THAT MY LIABILITY FOR THIS BILL IS NOT WAIVED AND AGREE TO BE HELD PERSONALLY LIABLE IN THE EVENT THAT THE INDICATED PERSON, COMPANY OR ASSOCIATION FAILS TO PAY THE FULL AMOUNT OF THESE CHARGES.

GUEST SIGNATURE

HOLIDAY INN - QUINCY
201 S. Third Street
Quincy, Illinois 62301
217/222-2666 FAX 217/222-3238

12999

KNAPHEIDE
SINCE 1848

Name Jim Barr
Department 640
Expenses Week Of 7-24-94 to 7-30-94
Todays Date 7-30-94

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
(Date							7-27-94		7-28-94		7-29-94			
(From							Quincy Ill				Pittsburgh, Pa.			
(To							St Louis, Mo.				St Louis, Mo.			
(To							Pittsburgh, Pa.				Quincy, Ill			
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
s & Entertainment:														
Breakfast							8 40		— —					
Lunch							— —		— —		14 83			
Dinner							34 97		— —		12 50			
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous									2 00		9 63			
Meals & Entertainment							43 37		2 00		36 96			

WEEKLY TOTAL MEALS & ENTERTAINMENT

Paid by Employee	Charged the Company
$82.33	

el & Lodging Expense:														
Transportation:														
Air														
Train or Bus														
Taxi or Limo														
Auto Miles Driven							12 @ 22				12 @ 22			
Miles x Current Rate							2 64				2 64			
Gasoline Expense														
Other Auto Expense														
Auto Rental Expense														
Lodging							219 52		219 52					
Postage, Telephone							97		4 62					
Service Gratuity							4 00				2 00			
Miscellaneous														
Total Travel & Lodging							227 13		224 14		4 64			
ND TOTAL ALL EXPENSES							270 50		226 14		41 60			

970100 82.33
970200 455.03
KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS
970300 5.28

Balance Forward	—	—
Advance to Employee	900	00
Actual Paid by Employee	538	24
Due Employee (Knapheide)	361	76

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	82 33		
Total Travel & Lodging	455 91		
Automobile Rental	— —		
Grand Total	538 24		

Approved a) [signature] b) [signature]
Date a) 7-30-94 b) 8/19/94
TM 2 19 94

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:
E-Coat training for Dick Whicher & Jim Burnett. Both expenses are recorded on this report. There will be no report for Dick.

Business Purpose Codes:
1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from Charge Cards must be attached. (No photo copies)

A business explanation is needed for all travel expenses.

Remember
• Enclose your check or money order, payable in U.S. dollars, with this payment coupon, but do not staple or tape them together.
• Do not send cash. ... on the front of your check or

s 62306-2140

DINERS CLUB ACCOUNT ACTIVITY

ACCOUNT: 3883 317500 0009
Name: KNAPHEIDE MFG CO
Billing Date: 08-25-94

Date	Description	Reference Number	Charges and Other Debits	Payments and Credits
	CONTINUED FROM PREVIOUS PAGE			
07-19-94	TRANS WORLD AIRLINES TRAVLR: GENENBACHER/D TICKET NUM: 0151471570748 DEPARTURE DATE: 07/29/94 ATLANTA:Y:ST. LOUIS ST. LOUIS:Y:QUINCY	B7J02153	$231.00	
07-19-94	TRANS WORLD AIRLINES TRAVLR: WHICKER/D TICKET NUM: 0151471570755 DEPARTURE DATE: 07/27/94 QUINCY:Y:ST. LOUIS ST. LOUIS:Y:PITTSBURGH PITTSBURGH :Y:ST. LOUIS ST. LOUIS:Y:QUINCY	B7J02154	532.50	
07-19-94	TRANS WORLD AIRLINES TRAVLR: GENENBACHER/D TICKET NUM: 0151471570763 DEPARTURE DATE: 07/22/94 KNOXVILLE:Y:ST. LOUIS ST. LOUIS:Y:QUINCY	B7J02155	227.25	
07-20-94	TRANS WORLD AIRLINES TRAVLR: MAHONEY/P TICKET NUM: 0151472989215 DEPARTURE DATE: 07/26/94 QUINCY:K:ST. LOUIS ST. LOUIS:K:DETROIT DETROIT:K:ST. LOUIS ST. LOUIS:K:QUINCY	B7J02156	305.00	
07-22-94	TRANS WORLD AIRLINES TRAVLR: WREN/J TICKET NUM: 0151469873634	B7J02102		$532.50

se
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stant

ACCOUNT ACTIVITY CONTINUED ON NEXT PAGE

See reverse side for important information.

CITIBANK

2/4 DR

2989215
USD305.00

DINERS CLUB ACCOUNT ACTIVITY

ACCOUNT: 3883 317500 0009
Name: KNAPHEIDE MFG CO
Billing Date: 07-25-94

Date	Description	Reference Number	Charges and Other Debits	Payments and Credits
	CONTINUED FROM PREVIOUS PAGE			
06-22-94	NORTHWEST AIRLINES TRAVLR: KIPLEY/D TICKET NUM: 0121469873447 DEPARTURE DATE: 06/27/94 ST. LOUIS:K:DETROIT DETROIT: :TRAVERSE CI TRAVERSE CI:M:MILWAUKEE MILWAUKEE:M:ST. LOUIS	I6L28911	$220.00	
06-27-94	TRANS WORLD AIRLINES TRAVLR: MAHONEY TICKET NUM: 0151002177250	06178178		$197.00
07-06-94	TRANS WORLD AIRLINES TRAVLR: KNAPHEIDE/H TICKET NUM: 0151469873599 DEPARTURE DATE: 07/20/94 ST. LOUIS:T:SAN FRANCIS SAN FRANCIS:T:ST. LOUIS	B7C12223	383.00	
07-06-94	TRANS WORLD AIRLINES TRAVLR: KNAPHEIDE/A TICKET NUM: 0151469873600 DEPARTURE DATE: 07/20/94 ST. LOUIS:T:SAN FRANCIS SAN FRANCIS:T:ST. LOUIS	B7C12224	383.00	
07-08-94	TRANS WORLD AIRLINES TRAVLR: BARNETT/J TICKET NUM: 0151469873633 DEPARTURE DATE: 07/27/94 QUINCY:Y:ST. LOUIS ST. LOUIS:Y:PITTSBURGH PITTSBURGH :Y:ST. LOUIS ST. LOUIS:Y:QUINCY	B7C12230	532.50	

honey

ACCOUNT ACTIVITY CONTINUED ON NEXT PAGE

KNAPHEIDE
SINCE 1848

12999
5283

Name Jim Bain
Expenses Week Of 11-20-94 to 11-26-94
Department 640
Todays Date 11-28-94

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
(Date			11-21-94		11-22-94									
(From			Quincy Ill		Chicago Ill									
(To			Chicago Ill		St Louis, MO									
(To					Quincy Ill									
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
s & Entertainment:														
Breakfast			—	—	—	—								
Lunch			—	—	—	—								
Dinner			—	—	—	—								
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous			13 00											
Meals & Entertainment			13 00		0 00									

Paid by Employee	Charged the Company
13 00	

WEEKLY TOTAL MEALS & ENTERTAINMENT

ENTERED NOV 30 1994

el & Lodging Expense:

Transportation:														
Air														
Train or Bus														
Taxi or Limo			8 00		33 00									
Auto Miles Driven														
Miles x Current Rate			120 22		120 22									
Gasoline Expense			2 64		2 64									
Other Auto Expense														
Auto Rental Expense														
Lodging			113 75		— —									
Postage, Telephone			1 50		— —									
Service Gratuity			2 00		4 00									
Miscellaneous			3 50		2 00									
Total Travel & Lodging			131 39		41 64									
ND TOTAL ALL EXPENSES			144 39		41 64									

970100 13 00
970200 126 75
E KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS
970400 41 00

Balance Forward	— —
Advance to Employee	— —
Actual Paid by Employee	186 03
Due Employee (Knapheide)	186 03

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	13 00		
Total Travel & Lodging	173 03		
Automobile Rental	— —		
Grand Total	186 03		

Approved a) [signature]
b) Gerry

Date a) 11-28-94 b) 11/29/94
TM 11-29-94

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

(6) – Meet With Mc Clin on new facility planning.

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

DINERS CLUB ACCOUNT ACTIVITY

ACCOUNT: 3883 317500 0009
Name: KNAPHEIDE MFG CO
Billing Date: 12-23-94

Date	Description	Reference Number	Charges and Other Debits	Payments and Credits
	CONTINUED FROM PREVIOUS PAGE			
11-21-94	TRANS WORLD AIRLINES TRAVLR: BARNETT/J TICKET NUM: 0151489034293 DEPARTURE DATE: 11/22/94 ST. LOUIS:Y:QUINCY	BBM01489	$208.19	
11-21-94	SOUTHWEST AIRLINES TRAVLR: BARNETT/J TICKET NUM: 5268477878732 DEPARTURE DATE: 11/22/94 CHICAGO:Y:ST. LOUIS	BBM02751	72.00	
11-21-94	SOUTHWEST AIRLINES TRAVLR: AUGGINS/H TICKET NUM: 5268477878731 DEPARTURE DATE: 11/22/94 CHICAGO:Y:ST. LOUIS	BBM02753	72.00	
11-22-94	TRANS WORLD AIRLINES TRAVLR: PRENGER/J TICKET NUM: 0151489034299 DEPARTURE DATE: 12/12/94 ST. LOUIS:S:OKLAHOMA CI	BBM01490	45.00	
11-22-94	NORTHWEST AIRLINES TRAVLR: RICH/J TICKET NUM: 0121489034300 DEPARTURE DATE: 12/04/94 ST. LOUIS:B:MINNEAPOLIS MINNEAPOLIS:V:RAPID CITY	IBL21323	409.00	
11-22-94	USAIR INC P210 TRAVLR: GENENBACHER/D TICKET NUM: 0371489034315 DEPARTURE DATE: 12/03/94 MOBILE AL/P:Y:CHARLOTTE CHARLOTTE:Y:ST. LOUIS	IBL44334	341.00	

ACCOUNT ACTIVITY CONTINUED ON NEXT PAGE

KNAPHEIDE
SINCE 1848

12999
5283

Name Jim Bain
Expenses Week Of 1-22-95 1-28-95
Department 640
Todays Date 1-30-95

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
(Date					1-24-95		1-25-95		1-26-95					
(From					Quincy Il		Milwaukee WI		Quincy Il					
ravel (To					St Louis MO		Quincy Il		Chicago Il					
(To					Milwaukee WI.				Milwaukee WI					
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
eals & Entertainment:														
Breakfast					4 25		3 75		— —					
Lunch					6 30		— —		— —					
Dinner					— —		— —		— —					
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous					1 32		2 20							
otal Meals & Entertainment					11 87		5 95		0 00					

NTERED FEB 2 1995

WEEKLY TOTAL MEALS & ENTERTAINMENT

Paid by Employee	Charged the Company
$17.82	

ravel & Lodging Expense:														
Transportation:														
Air														
Train or Bus														
Taxi or Limo					32 00				25 00					
Auto Miles Driven					12@22¢		12@22¢		24@22¢					
Miles x Current Rate					2 64		2 64		5 28					
Gasoline Expense														
Other Auto Expense														
Auto Rental Expense														
Lodging					57 25									
Postage, Telephone														
Service Gratuity														
Miscellaneous														
Total Travel & Lodging					91 89		2 64		30 28					
GRAND TOTAL ALL EXPENSES					103 70		8 59		30 28					

097040 57.25
10970300 10.56
THE KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS
409701 17.82
409702 57.88

Balance Forward	—	—
Advance to Employee	—	—
Actual Paid by Employee	142	63
Due Employee (Knapheide)	142	63

112

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	17 82		
Total Travel & Lodging	124 81		
Automobile Rental	— —		
Grand Total	142 63		

Approved a) [signature]
b) Terry Kurt
Date a) 1-30-95 b) 1/30/95
TM 1-31-95

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

(6) E-Coat paint test. (Tuesday & Wednesday)
(6) Visit Mc Clair on new facility. (Thursday)

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from Charge Cards must be attached. (No photo copies)

A business explanation is needed for all travel expenses.

DINERS CLUB ACCOUNT ACTIVITY

ACCOUNT: 3883 317500 0009
Name: KNAPHEIDE MFG CO
Billing Date: 02-23-95

Date	Description	Reference Number	Charges and Other Debits	Payments and Credits
	CONTINUED FROM PREVIOUS PAGE			$505.00
01-18-95	UNITED AIRLINES TRAVLR: BAKER/B TICKET NUM: 0161493516082	B1L10425		534.00
01-18-95	UNITED AIRLINES TRAVLR: EAREL/B TICKET NUM: 0161482407588	B1L10426		45.00
01-18-95	MARKAIR AIRLINE TRAVLR: BAKER/B TICKET NUM: 4781493516083	B1L18048	$284.00	
01-20-95	CONTINENTAL AIR/CR MGMT TRAVLR: PRENGER/J TICKET NUM: 0051494883120 DEPARTURE DATE: 01/27/95 EL PASO:K:HOUSTON HOUSTON:K:ST. LOUIS	B1L03389	243.75 JM	
01-20-95	TRANS WORLD AIRLINES TRAVLR: BARNETT/J TICKET NUM: 0151494883112 DEPARTURE DATE: 01/24/95 QUINCY:Y:ST. LOUIS ST. LOUIS:Y:MILWAUKEE	B1L09416	162.00	
01-20-95	SOUTHWEST AIRLINES TRAVLR: PRENGER/J TICKET NUM: 5268481684075 DEPARTURE DATE: 01/24/95 TULSA:Y:DALLAS/FT. DALLAS/FT. :Y:ALBUQUERQUE	B1L18342	228.75	
01-25-95	TRANS WORLD AIRLINES TRAVLR: GENENBACHER/D TICKET NUM: 0151496381644 DEPARTURE DATE: 01/31/95 QUINCY:Y:ST. LOUIS ST. LOUIS:Y:MEMPHIS	B1N02897		

ACCOUNT ACTIVITY CONTINUED ON NEXT PAGE

See reverse side for important information.

CITIBANK

KNAPHEIDE
SINCE 1845

12447
5283

Name Jim Barnett
Expenses Week Of 2-21-95 Thru 2-25-95
Department 640
Todays Date 2-27-95

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
Travel (Date					2-21-95		2-22-95		2-23-95					
(From					Quincy, Ill				Cleveland, OH.					
(To					St Louis, Mo.				St Louis, Mo.					
(To					Cleveland, OH.				Quincy, Ill.					
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
Meals & Entertainment:														
Breakfast					8 71		— —		— —					
Lunch					— —		— —		— —					
Dinner					— —		— —		4 27					
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous					2 00		3 00							
Total Meals & Entertainment					10 71		3 00		4 27					

WEEKLY TOTAL MEALS & ENTERTAINMENT

Paid by Employee	Charged the Company
$17.98	

ENTERED MAR 1995

Travel & Lodging Expense:														
Transportation:														
Air														
Train or Bus														
Taxi or Limo														
Auto Miles Driven					28@22¢				28@22¢					
Miles x Current Rate					6 16				6 16					
Gasoline Expense														
Other Auto Expense														
Auto Rental Expense														
Lodging					71 92		71 92							
Postage, Telephone														
Service Gratuity					2 00				2 00					
Miscellaneous							9 00*							
Total Travel & Lodging					80 08		80 92		8 16					
GRAND TOTAL ALL EXPENSES					90 79		83 92		12 43					

640970100 17.98
640970200 156.84
THE KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS
6409703 2.52

Balance Forward	— —
Advance to Employee	— —
Actual Paid by Employee	187 14
Due Employee (Knapheide)	187 14

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	17 98		
Total Travel & Lodging	169 16		
Automobile Rental	— —		
Grand Total	187 14		

Approved a) J. K. Barnett
b) [signature]
Date a) 2-27-95 b)
TM 2/27/95

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

(6) Finishing test for new facility. $9.00* misc. on 2-22-95 was a baggage check charge from the last trip to Chicago that was left off in error.

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

KNAPHEIDE®
SINCE 1848

12333
5102

Name GARY MOHR
Expenses Week Of 20 FEB 95

Department 609 / M.E.
Todays Date 24 FEB 95

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Travel (Date			21 FEB 95	22 FEB	23 FEB		
(From			ST. LOUIS	—	CLEVELAND		
(To			CLEVELAND	—	ST. LOUIS		
(To					2/23/95		

	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
Meals & Entertainment:														
Breakfast					4 41				3. 11					
Lunch														
Dinner														
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous														
Total Meals & Entertainment					4 41									

FILED FEB 2 5 1995

WEEKLY TOTAL MEALS & ENTERTAINMENT

Paid by Employee	Charged the Company
7.52	

Travel & Lodging Expense:														
Transportation:														
Air														
Train or Bus														
Taxi or Limo														
Auto Miles Driven					125				125					
.22 Miles x Current Rate					27 50				27 50					
Gasoline Expense														
(*) Other Auto Expense									22 50					
Auto Rental Expense														
									64 11					
Lodging							64 11		~~131 33~~					
Postage, Telephone														
Service Gratuity									2 –					
Miscellaneous														
Total Travel & Lodging					27 50				183 33					
GRAND TOTAL ALL EXPENSES					31 91				183 33					

609970 1W 7.52
609970 2W 130.22
THE KNAPH[illegible] MFG. CO.
QUINCY [illegible]NOIS
609970 3W [illegible]55.00
609960 5 30 22.50

Balance Forward	0
Advance to Employee	0
Actual Paid by Employee	215 24
Due Employee (Knapheide)	215 24

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	4 41		
Total Travel & Lodging	210 83		
Automobile Rental			
Grand Total	215 24		

Approved a) [signature]
b)
Date a) 3-3-95 b)

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

TRAVEL TO NORDSON CORP. FOR PRODUCT TESTING - COATING MATERIALS

OTHER AUTO EXPENSE — PAYMENT FOR AUTO PARKING AT AIRPARK, ST. LOUIS.

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

DINERS CLUB ACCOUNT ACTIVITY

ACCOUNT: 3883 317500 0009
Name: KNAPHEIDE MFG CO
Billing Date: 03-27-95

Date	Description	Reference Number	Charges and Other Debits	Payments and Credits
	CONTINUED FROM PREVIOUS PAGE			
02-17-95	DELTA AIR LINES TRAVLR: PRENGER/J TICKET NUM: 0061499330244 DEPARTURE DATE: 03/03/95 SACRAMENTO :M:SALT LAKE C SALT LAKE C:M:ST. LOUIS	B2K10770	$205.00	
02-17-95	TRANS WORLD AIRLINES TRAVLR: MAHONEY/P TICKET NUM: 0151499330235 DEPARTURE DATE: 02/20/95 ST. LOUIS:T:DETROIT DETROIT:T:ST. LOUIS	B2K18665	174.00	
	SOUTHWEST AIRLINES TRAVLR: BARNETT/J TICKET NUM: 5268481684127 DEPARTURE DATE: 02/21/95 ST. LOUIS:H:CLEVELAND CLEVELAND:H:ST. LOUIS	B2K37146	179.00	
02-17-95	SOUTHWEST AIRLINES TRAVLR: MOHR/G TICKET NUM: 5268481684128 DEPARTURE DATE: 02/21/95 ST. LOUIS:H:CLEVELAND CLEVELAND:H:ST. LOUIS	B2K37147	6.00	
02-20-95	DELTA AIR LINES TRAVLR: KNAPHEIDE/H TICKET NUM: 0061499330248 DEPARTURE DATE: 02/24/95 ORLANDO:K:JACKSONVILL	B2O08813	114.00	
02-20-95	TRANS WORLD AIRLINES TRAVLR: BOCKENFELD/J TICKET NUM: 0151499330246 DEPARTURE DATE: 02/22/95 ST. LOUIS:Y:TAMPA/ST. P	B2O15853	403.50	

(2) for (1)

ACCOUNT ACTIVITY CONTINUED ON NEXT PAGE

See reverse side for important information.

M003447

CITIBANK

3/16/95 TRIP TO TTX
STURGEON BAY, WI

LODGING, ETC

JIM BARNETT	41.36
HAROLD HUGGINS	36.08
GERRY KORB	36.08
	$113.52

TRAVEL

3 @ 598 = $1,794

KNAPHEIDE
SINCE 1848

12997
5283

Name Jim Barnett Department 640

Expenses Week Of 3-12-95 thru 3-18-95 Todays Date 3-22-95

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
(Date		3-13-95		3-15-95	3-16-95	3-17-95	
(From					Quincy Ill	Stargeon Bay WI	
avel (To					St Louis Mo.	Chicago Ill	
(To					Milwaukee WI	Quincy Ill	

	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
eals & Entertainment:														
Breakfast														
Lunch			7 38				14 00							
Dinner														
Entertainment														
Entertainment														
Entertainment (Explain on Back)														
Miscellaneous														
otal Meals & Entertainment			7 38				14 00							

INTERED MAR 2 3 1995

WEEKLY TOTAL MEALS & ENTERTAINMENT

Paid by Employee	Charged the Company
21 38	

ravel & Lodging Expense:																		
Transportation:																		
Air																		
Train or Bus																		
Taxi or Limo																		
Auto Miles Driven											12@22¢		12@22¢					
Miles x Current Rate											2 64		2 64					
Gasoline Expense																		
Other Auto Expense																		
Auto Rental Expense																		
Lodging											36 08							
Postage, Telephone																		
Service Gratuity																		
Miscellaneous																		
Total Travel & Lodging			– –				– –				38 72		2 64					
GRAND TOTAL ALL EXPENSES			7 38				14 00				38 72		2 64					

0970100 21.38
0970200 36.08

THE KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS

0970300 5.28

Balance Forward	– –
Advance to Employee	– –
Actual Paid by Employee	62 74
Due Employee (Knapheide)	62 74

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	21 38		
Total Travel & Lodging	41 36		
Automobile Rental	– –		
Grand Total	62 74		

Approved 41.36

Date

a) 3-22-95 b) 3-22-95

TM

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

6.) Visit T.T.X. for new plant paint system. Lunch on 3-13-95 for M.E. of the month

Lunch on 3-15-95 with Brad H. from Pinnacle on C.G.I.

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

KNAPHEIDE
SINCE 1848

10742
5016

Name Harold Huggins
Expenses Week Of
Department FACILITIES
Todays Date 3-27-95

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
(Date					3-16-95		
(From							
avel (To							
(To							

	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
eals & Entertainment:														
Breakfast														
Lunch														
Dinner														
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous														
otal Meals & Entertainment														

	Paid by Employee	Charged the Company
WEEKLY TOTAL MEALS & ENTERTAINMENT		

ENTERED MAR 2 1995

ravel & Lodging Expense:														
Transportation:														
Air														
Train or Bus														
Taxi or Limo														
Auto Miles Driven														
Miles x Current Rate														
Gasoline Expense														
Other Auto Expense														
Auto Rental Expense														
Lodging									36 08					
Postage, Telephone														
Service Gratuity														
Miscellaneous														
Total Travel & Lodging														
GRAND TOTAL ALL EXPENSES									36 08					

10970LW 36.08

THE KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS

Balance Forward	
Advance to Employee	
Actual Paid by Employee	
Due Employee (Knapheide)	36 08

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment			
Total Travel & Lodging	36 08		
Automobile Rental			
Grand Total	36 08		

Approved a) Harold Huggins
b) Perry

Date a) b)

TM 3/28/95

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

Trip to Termatronex

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

KNAPHEIDE
SINCE 1848

12812

Name GERRY KORB Department 850

Expenses Week Of 3/12-18, 95 Todays Date 3/18/95

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
(Date					3/16/95		
(From					Q	STURGEON BAY	
vel (To					MILW	GREEN BAY	
(To					STURGEON BAY, WI	Q	

	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
eals & Entertainment:														
Breakfast														
Lunch														
Dinner														
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous														
tal Meals & Entertainment														

	Paid by Employee	Charged the Company
WEEKLY TOTAL MEALS & ENTERTAINMENT		

ENTERED MAR 2 1 1995

avel & Lodging Expense:														
Transportation:														
Air										255 -		343 -		
Train or Bus														
Taxi or Limo														
Auto Miles Driven														
Miles x Current Rate														
Gasoline Expense														
Other Auto Expense														
Auto Rental Expense														
Lodging									36 08					
Postage, Telephone														
Service Gratuity														
Miscellaneous														
Total Travel & Lodging									36 08	255 -		343 -		
RAND TOTAL ALL EXPENSES									36 08	255 -		343 -		

097020
3608

HE KNAPHEIDE MFG. CO.
QUINCY, ILLINOIS

Balance Forward	
Advance to Employee	
Actual Paid by Employee	36 08
Due Employee (Knapheide)	36 08

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment		598 -	
Total Travel & Lodging	36 08	36 08	
Automobile Rental			
Grand Total	36 08	598 -	

Approved a) Gerry
b) TM

Date a) 3/18/95 b) 3-20-95

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount

Reason for Trip and Other Remarks:

Look @ E-Coat Mfgr & Installations

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

DINERS CLUB ACCOUNT ACTIVITY

ACCOUNT: 3883 317500 0009
Name: KNAPHEIDE MFG CO
Billing Date: 03-27-95

Date	Description	Reference Number	Charges and Other Debits	Payments and Credits
	CONTINUED FROM PREVIOUS PAGE			
03-07-95	SOUTHWEST AIRLINES TRAVLR: EASTERLING/J TICKET NUM: 5268481684184 DEPARTURE DATE: 04/02/95 HOUSTON:Q:ST. LOUIS ST. LOUIS:Q:HOUSTON	B3G42812	$157.00	
03-09-95	TRANS WORLD AIRLINES TRAVLR: KORB/G TICKET NUM: 0151402213818 DEPARTURE DATE: 03/16/95 QUINCY:Y:ST. LOUIS ST. LOUIS:Y:MILWAUKEE	B3G22429	255.00	
03-09-95	TRANS WORLD AIRLINES TRAVLR: BARNETT/J TICKET NUM: 0151402213820 DEPARTURE DATE: 03/16/95 QUINCY:Y:ST. LOUIS ST. LOUIS:Y:MILWAUKEE	B3G22430	255.00	
03-09-95	AMERICAN AIRLINES TRAVLR: KORB/G TICKET NUM: 0011402213819 DEPARTURE DATE: 03/17/95 GREEN BAY:Y:CHICAGO CHICAGO:H:QUINCY	I3E01119	343.00	
03-09-95	AMERICAN AIRLINES TRAVLR: BARNETT/J TICKET NUM: 0011402213821 DEPARTURE DATE: 03/17/95 GREEN BAY:Y:CHICAGO CHICAGO:H:QUINCY	I3E01120	343.00	
03-10-95	TRANS WORLD AIRLINES TRAVLR: MAHONEY/P TICKET NUM: 0151499330270	B3G21173		$243.75

ACCOUNT ACTIVITY CONTINUED ON NEXT PAGE

709-1

SOUTHWEST

WHITE AREA ABOVE

DINERS CLUB ACCOUNT ACTIVITY

ACCOUNT: 3883 317500 0009
Name: KNAPHEIDE MFG CO
Billing Date: 03-27-95

Date	Description	Reference Number	Charges and Other Debits	Payments and Credits
	CONTINUED FROM PREVIOUS PAGE			$243.75
03-10-95	TRANS WORLD AIRLINES TRAVLR: TERFORD/R TICKET NUM: 0151497804359	B3G21174	$255.00	
03-10-95	TRANS WORLD AIRLINES TRAVLR: HUGGINS/H TICKET NUM: 0151402213840 DEPARTURE DATE: 03/16/95 QUINCY:Y:ST. LOUIS ST. LOUIS:Y:MILWAUKEE	B3G22431	474.79	
03-10-95	CONTINENTAL AIR/CR MGMT TRAVLR: LACKEY/J TICKET NUM: 0057764811848 DEPARTURE DATE: 03/22/95 KANSAS CITY:Y:HOUSTON HOUSTON:Y:JACKSONVILL JACKSONVILL:Y:ATLANTA ATLANTA:M:KANSAS CITY	B3I00820	343.00	
03-10-95	AMERICAN AIRLINES TRAVLR: HUGGINS/H TICKET NUM: 0011402213841 DEPARTURE DATE: 03/17/95 GREEN BAY:Y:CHICAGO CHICAGO:H:QUINCY	I3F01542		
	TOTAL FOR: 3883 317500 0108		$11,228.61	$1,361.02

Previous Balance	- Payments	- Credits	= Past Due Balance	
$4,224.98	$4,224.98	$1,361.02	$0.00	
+ Late Fees	+ New Charges	+ Other Debits	+/- Travel Advances	= Diners Club Balance Due
$0.00	$11,228.61	$0.00	$0.00	$9,867.59

See reverse side for important information.

M003447

CITIBANK

KNAPHEIDE
SINCE 1848

5102

Name GARY MOHR 12333 Department MFG ENG

Expenses Week Of 3APR 95 Todays Date 5APR 95

	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
(Date					4APR 95									
(From					MONROE CITY, MO									
Travel (To					ST. LOUIS, MO									
(To					ST. LOUIS, MO									
	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.	Pd By Employ	Charge The Co.
Meals & Entertainment:														
Breakfast														
Lunch														
Dinner														
Entertainment														
Entertainment														
Entertainment														
(Explain on Back)														
Miscellaneous														
Total Meals & Entertainment														

Paid by Employee	Charged the Company

WEEKLY TOTAL MEALS & ENTERTAINMENT

ENTERED 1995

Travel & Lodging Expense:																				
Transportation:																				
Air																				
Train or Bus																				
Taxi or Limo																				
Auto Miles Driven																				
12 mi Miles x Current Rate							44 76													
Gasoline Expense																				
.23 Other Auto Expense							46 64													
22 Auto Rental Expense																				
Lodging																				
Postage, Telephone																				
Service Gratuity																				
Miscellaneous																				
Total Travel & Lodging							48 76													
GRAND TOTAL ALL EXPENSES							48 76													

14970300 46.64

THE KNAPHEIDE MFG. CO.
QUINCY, ILLIN

Balance Forward	
Advance to Employee	
Actual Paid by Employee	
Due Employee (Knapheide)	

	Paid by Employee	Charged to Company	For Accounting Use Only
Total Meals & Entertainment	—		
Total Travel & Lodging	48 76		
Automobile Rental			
Grand Total	48 76		

Approved a) [signature]
b)

Date a) 4-12-95

DETAIL OF ENTERTAINMENT EXPENSE

Date	Ref. No.	Persons Entertained	Company	Business Purpose	Type of Expense	Where Incurred	Amount
4APR95		TRIP TO ST. LOUIS TO VISIT AREA COMPANIES USING POWDER COATING TECHNOLOGY.					

Reason for Trip and Other Remarks:

Business Purpose Codes:

1. Order Solicitation–Existing Customer
2. Order Solicitation–Prospective Customer
3. Servicing Customers
4. Trade & Professional Association Meeting
5. Product Promotion
6. Other (Please explain above or attach explanation)

Receipts required when possible,
A MUST over $25.00 per single expenditure.
The original or carbon copy receipts from
Charge Cards must be attached. (No photo copies)

A business explanation is needed for all
travel expenses.

PAINT TECHNOLOGY INVESTIGATION / EVALUATION

9/19/95 Update

DATE	EVENT	COSTS	
1994			
JAN 27 & 28	PAINT SEMINAR		
	BOB GREAR, SME - INSTRUCTOR	$ 5,210	
	REFRESHMENTS & LUNCHES	357	
		78	
	(18) ATTENDEES @ $40K EA * 2 DAYS	5,760	11,405
FEB 11 & 12	PAINT CONSULTING		
	BOB GREAR - FEES & TRAVEL	1,382	
	LUNCH	9	1,391
MAR 14 & 15	PAINT CONSULTING		
	BOB GREAR - FEES & TRAVEL	1,247	
	LUNCH, MOTEL	124	1,371
APR 25 & 26	PAINT CONSULTING - BOB GREAR &		
	KENNETH LITTEREST -FEES & TRAVEL	1,332	
	LUNCH, MOTEL	276	1,608
APR 25 & 26	POWDER PAINT SEMINAR - (JIM BARNETT)		
	TRAVEL & LODGING	400	
	SEMINAR COST	235	
			635
APR 28 & 29	E-COAT TNG @ BASF		
	(JIM BARNETT, HAROLD HUGGINS, KEITH NORRIS, JON WREN, JOHN BAIRD, JOHN EVANS)		
	LODGING & MEALS	420	
	JIM BARNETT TRAVEL	141	
	TRAVEL (3.8 HRS @ 738/HR)	2,804	3,365
MAY 15 - 20	PAINT CONSULTING - KENNETH LITTEREST		
	FEES & TRAVEL	895	
	MOTEL	294	1,189
JUN 27	TO CHRYSLER TEST LAB IN DETROIT, ANDERSON MFG, DUKES INDUSTRIES & DEFIANCE METAL PRODUCTS (JIM BARNETT, HAROLD HUGGINS, JOHN EVANS, DICK WHICKER, GERRY KORB)		
	TRAVEL (4.4 HRS @ 738/HR)		3,247

DATE	EVENT	COSTS	
JUN 28	TO WINNEBAGO INDUSTRIES & LENNOX (JIM BARNETT, HAROLD HUGGINS, KNAP, DICK WHICKER, GERRY KORB)		
	TRAVEL (2.9 HRS @ 738/HR)		2,140
JUL 27 - 29	SEMINAR - PPG COATINGS, PITTSBURGH (DICK WHICKER & JIM BARNETT)		
	TRAVEL	1,065	
	MEALS & LODGING	538	1,603
AUG 16	TO COOPER POWER SYSTEMS & STEELTECH, MILW (JIM BARNETT, HAROLD HUGGINS, DICK WHICHER, BILL GREVING, GERRY KORB)		
	TRAVEL (2.0 HR @ 738/ HR)		1,476
NOV 21	TO MORTON POWDER & WAGNER RECLAIM - (JIM BARNETT)		
	TRAVEL	280	
	LODGING	186	466
1995 JAN 25	E-COAT PARTS @ STEELTECH (JIM BARNETT, DICK WHICHER, JOHN BAIRD, GARY MOHR, BILL GREVING)		
	TRAVEL & LODGING FOR JIM BARNETT	356	
	TRAVEL (2.5 HRS @ 738/ HR)	1,845	2,201
JAN 26	REVIEW E-COAT PARTS @ STEELTECH (JIM BARNETT) CHIC TO MILW		
	TRAVEL (1.5 HR @ 738)		1,107
FEB 21 - 23	POWDER TEST @ NORDSON (GARY MOHR & JIM BARNETT)		
	TRAVEL	185	
	LODGING	402	587

DATE	EVENT	COSTS	
MAR 16	TO TTX, STERGEON BAY, WI (JIM BARNETT, HAROLD HUGGINS, GERRY KORB)		
	TRAVEL	1,794	
	LODGING	114	1,908
MAR 30	TO JOHN DEERE, HORICON, WI & GEO KOCH & SONS, EVANSVILLE, IN (JIM BARNETT, GARY MOHR, GERRY KORB)		
	TRAVEL (5 HR @ 738)		3,690
APR 18	TO ST LOUIS W/ NORDSON TO LOOK AT POWDER EQ (GARY MOHR)		
	TRAVEL & MEALS		47
FUTURE	FURTHER EVALUATION		5,000
	TOTAL COST		$ 44,437