G-000-103.11

216

INFORMATION REQUESTED BY PHILIP GEHRING, U.S. EPA

10/04/89

DOE-16-90
DOE-FMPC/USEPA
28
LETTER

Department of Energy
FMPC Site Office
P.O. Box 398705
Cincinnati, Ohio 45239-8705
(513) 738-6319

216

October 4, 1989
DOE-16-90

Mr. Philip E. Gehring
U.S. Environmental Protection Agency
Eastern District Office - 5 SEDO
25089 Center Ridge Road
Westlake, Ohio 44145

Dear Mr. Gehring:

INFORMATION REQUESTED BY PHILIP E. GEHRING, U.S. EPA

Reference: Conversation with S. M. Beckman, WMCO, requesting additional information during inspection at the FMPC on August 22, 1989.

Enclosed is information that you requested during your inspection of the FMPC on August 22, 1989. Attachment 1 contains the Material Safety Data Sheets for materials used in the Drum Painting operation. Attachment 2 contains a list of spills that have occurred onsite since January 1986 that have required the diversion of stormwater flow.

Following each spill, contingency measures outlined in the SPCC Plan were implemented to prevent release of contaminants to the Great Miami River or Paddy's Run. It is important to note that, in addition to the spill detection measures outlined in the SPCC Plan, four manholes upstream of the storm sewer lift station and the storm sewer lift station itself are equipped with pH probes which monitor the stream continuously. Any excursions from the preset range will automatically send a signal to the communications center. The dispatcher will then notify the Utility Engineer who will investigate the cause of the alarm and take appropriate action. The pump operators also make periodic inspections at the storm sewer lift station to check for indications that a spill has occurred.

A revision of the FMPC SPCC Plan is currently in progress and is scheduled to be completed during January 1990. The updated SPCC Plan will assess the adequacy of secondary containment currently in place at the FMPC and address any necessary actions required to provide additional containment.

If you require any additional information, please contact Jack Craig of my staff at (513) 738-6159 or FTS 774-6159.

Sincerely,

Ray Hansen for

James A. Reafsnyder
FMPC Site Manager

DP-84:Craig

Attachments: As stated

cc w/o atts.:

L. Sparks, SE-31, ORO
W. A. Weinreich, WMCO
M. J. Galper, WMCO

ATTACHMENT 1

MATERIAL SAFETY DATA SHEETS

CHEMICAL MATERIALS USED AT THE PLANT 1 DRUM PAINTING OPERATION

Spray Booth Treatment Chemicals:

11542	Dubois "Peel Filmite"
11382	Dubois "Depress 14"
11381	Dubois "Perj"
11380	Dubois "Ducide 20"
11379	Dubois "Dtac"

Drum Paints:

10725	Black Water Reducible Drum Enamel
10726	Clear Water Reducible Drum Enamel
10724	Red Water Reducible Drum Enamel

MATERIAL SAFETY DATA SHEET

QUICK IDENTIFIER ▶ PEEL FILMITE Revised Nov 89

DUCARE-8:00-5:00 EST-MON-FRI 1-800-543-490
24 HR MESSAGE CENTER: 1-800-438-2647

WESTINGHOUSE MATERIALS CO. OF OHIO
PO BOX 398704
CINCINNATI, OHIO 45239-8704

ATTN: L.B. KO

MANUFACTURER: DUBOIS CHEMICALS, INC
3630 E. KEMPER ROAD
SHARONVILLE, OHIO 45241
PREPARED BY: M. ANTOSIAK
ON 07/16/87

216

EMERGENCY PHONE NO. 513-554-4200

REFERENCE SEQ # 12536

ABBREVIATIONS ..C-CEILING..MP-MAXIMUM PEAK..N/A-NOT APPLICABLE..N/K-NOT KNOWN..P-POTENTIAL..PEL-PERMISSIBLE EXPOSURE LIMIT..PM-PENSKY MARTENS..S-SKIN..ST-SHORT TERM..TLV-THRESHOLD LIMIT VALUE..TWA-TIME WEIGHTED AVERAGE..

SECTION-1 IDENTITY

COMMON NAME USED ON LABEL: PEEL FILMITE — CODE 02165

CHEMICAL FAMILY: VINYL RESIN IN SOLVENT

SECTION-2 HAZARDOUS INGREDIENTS (ONLY ITEMS LISTED ARE HAZARDOUS BY TITLE 29CFR 1910.1200)

PRINCIPAL HAZARDOUS COMPONENT(S) CHEMICAL & COMMON NAME	%	EXPOSURE LIMITS (TWA 8 HOUR UNLESS OTHERWISE SPECIFIED)	UNITS
TOLUENE	<30	TLV 100; PEL 200; C 300; MP 500; ST 150	PPM
METHYLENE CHLORIDE	<40	TLV 100; PEL 500; C 1000; MP 2000	PPM

SECTION-3 PHYSICAL & CHEMICAL CHARACTERISTICS (FIRE & EXPLOSION DATA)

BOILING POINT 105 °F — SPECIFIC GRAVITY 1.066 — VAPOR PRESSURE <300 mmHg@20 °C — VOLATILE BY VOLUME 70 %

VAPOR DENSITY AIR=1 UNK — EVAPORATION RATE (n-BUTYL ACETATE=1) 10 — SOLUBILITY IN WATER <0.1 % — REACTIVITY IN WATER / HEAT EVOLUTION NONE

APPEARANCE & ODOR: OPAQUE WHITE SLIGHTLY VISCOUS LIQUID; SOLVENT ODOR.

FLASH POINT 143 °F PENSKY MARTENS — FLAME EXTENSION N/A in. — FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER NONE, UPPER NONE — AUTO IGNITION TEMPERATURE N/A °F

EXTINGUISHER MEDIA: CO2, DRY CHEMICALS

FIREFIGHTING SPECIAL PROCEDURES: NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS: CHLORINATED SOLVENT DECOMPOSITION PRODUCTS ARE TOXIC.

SECTION-4 PHYSICAL HAZARDS

STABILITY: STABLE — POLYMERIZATION: NONE

INCOMPATIBLE WITH: SOFT METALS, STRONG ACIDS, OXIDIZERS

DECOMPOSITION PRODUCTS: HCL AND PHOSGENE WITH INCOMPLETE COMBUSTION

SECTION-5 HEALTH HAZARDS

PRIMARY ROUTES OF ENTRY — INHALATION YES — SKIN YES — INGESTION YES

SIGNS AND SYMPTOMS OF OVEREXPOSURE

1. ACUTE: DIZZINESS, MAY IRRITATE SKIN AND EYES.
2. CHRONIC: SAME AS ACUTE

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: SENSITIVE SKIN, EYES

LISTED CARCINOGEN: NONE — NTP NO — IARC NO — OSHA

EMERGENCY AND FIRST AID PROCEDURES

1. INHALATION: REMOVE TO FRESH AIR
2. EYES: FLUSH THOROUGHLY WITH FRESH WATER, GET MEDICAL ATTENTION
3. SKIN: FLUSH WITH FRESH WATER, WASH WITH SOAP AND WATER REMOVE CONTAMINATED CLOTHES AND SHOES

MATERIAL SAFETY DATA SHEET

QUICK IDENTIFIER ▶ DUCIDE 20 11380

CUSTOMER NAME AND ADDRESS

WESTINGHOUSE MATERIALS CO OF OHIO
P.O. BOX 398704
CINTI, OH 45239

ATTN: ATTN: FULTZ

MANUFACTURER'S NAME & ADDRESS

DuBOIS CHEMICALS 216
DIV. OF CHEMED CORP.
3630 E. KEMPER ROAD
SHARONVILLE, OHIO 45241

EMERGENCY PHON
513-769-4200

REFERENCE
SEQ # 69

PREPARED BY W. J. CORBETT ON 07/08/E

ABBREVIATIONS ..C-CEILING..MP-MAXIMUM PEAK..N/A-NOT APPLICABLE..N/K-NOT KNOWN..P-POTENTIAL..PEL-PERMISSIBLE EXPOSURE IT..PM-PENSKY MARTENS..S-SKIN..ST-SHORT TERM..TLV-THRESHOLD LIMIT VALUE..TWA-TIME WEIGHTED AVERAGE..

SECTION 1 — IDENTITY

COMMON NAME USED ON LABEL DUCIDE 20 CODE 01557

CHEMICAL FAMILY CUTTING FLUID BIOCIDE

SECTION 2 — HAZARDOUS INGREDIENTS (ONLY ITEMS LISTED ARE HAZARDOUS BY TITLE 29CFR 1910.1200)

PRINCIPAL HAZARDOUS COMPONENT(S) CHEMICAL & COMMON NAME	%	EXPOSURE LIMITS (TWA 8 HOUR UNLESS OTHERWISE SPECIFIED)	UNI
EPA REGISTERED PRODUCT # 5736-72			
NONE			

SECTION 3 — PHYSICAL & CHEMICAL CHARACTERISTICS (FIRE & EXPLOSION DATA)

BOILING POINT 210 °F — SPECIFIC GRAVITY 1.02 — VAPOR PRESSURE 17.5 MMHg@ 20 °C — VOLATILE BY VOLUME 94 %

VAPOR DENSITY AIR = 1 N/A — EVAPORATION RATE (n-BUTYL ACETATE=1) >1 — SOLUBILITY IN WATER 100 % — REACTIVITY / HEAT IN WATER / EVOLUTION NONE

APPEARANCE & ODOR PALE YELLOW TO GREEN LIQUID; MILD AROMATIC ODOR

FLASH POINT N/A °F — FLAME EXTENSION N/A in. — FLAMMABLE LIMITS IN AIR BY VOLUME LOWER NONE UPPER NONE — AUTO IGNITION TEMPERATURE N/A °F

EXTINGUISHER MEDIA WATER

FIREFIGHTING SPECIAL PROCEDURES: WERA MESA/NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS, SCHEDULE 13. USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINER.

UNUSUAL FIRE AND EXPLOSION HAZARDS: DO NOT ALLOW SOLUTION TO EVAPORATE TO DRYNESS, DRY NITRATES IN COMBINATION WITH ORGANIC MATERIAL CAN BE EXPLOSIVE.

SECTION 4 — PHYSICAL HAZARDS

STABILITY STABLE — POLYMERIZATION NONE — INCOMPATABLE WITH NONE KNOWN

DECOMPOSITION PRODUCTS: OXIDES OF CARBON, SULFUR, HCL, NITROGEN.

SECTION 5 — HEALTH HAZARDS

PRIMARY ROUTES OF ENTRY — INHALATION NO — SKIN NO — INGESTION NO

SIGNS AND SYMPTOMS OF OVEREXPOSURE
1. ACUTE: DEFATE SKIN; IRRITATES EYES.
2. CHRONIC: SAME AS ACUTE

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: SENSITIVE SKIN

LISTED CARCINOGEN NONE — NTP NO — IARC NO — OSHA N

EMERGENCY AND FIRST AID PROCEDURES

1. INHALATION: N/A IN NORMAL OPERATIONS
2. EYES: FLUSH THOROUGHLY WITH FRESH WATER, GET MEDICAL ATTENTION
3. SKIN: FLUSH WITH FRESH WATER, WASH WITH SOAP AND WATER
   REMOVE CONTAMINATED CLOTHES AND SHOES
4. INGESTION: GIVE MILK, WATER OR EGG WHITES
   INDUCE VOMITING, GET MEDICAL ATTENTION

SECTION 6 — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION WEAK MESA/NIOSH APPROVED RESPIRATOR — VENTILATION LOCAL NONE

VENTILATION MECHANICAL YES — SPECIAL NONE

PROTECTIVE GLOVES IMPERVIOUS — EYE PROTECTION FACE SHIELD/GOGGLES

OTHER PROTECTIVE CLOTHING/EQUIPMENT: IMPERVIOUS PROTECTIVE APRON, EYEWASH FACILITY, EMERGENCY SHOWER.

SECTION 7 — SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

HANDLING AND STORAGE PRECAUTIONS: DO NOT PRESSURE CONTAINER TO EMPTY. MATERIAL IS A STRONG IRRITAN TO SKIN AND EYES. AVOID BODILY CONTACT. WORKERS SHOULD WASH AFTE EACH USE AND SHOWER AT END OF WORK PERIOD. MATERIAL MAY BE A SKI SENSITIZER IN SUSCEPTIBLE INDIVIDUALS.

OTHER PRECAUTIONS: DOT CORROSIVE

IF MATERIAL IS RELEASED/SPILLED: DIKE/ABSORB SPILL WITH HYPOCHLORITE SOLUTION AND INERT MATERIAL, (SAND,EARTH,ETC.)TRANSFER TO SUITABLE CONTAINER FOR DISPOSAL.

WASTE DISPOSAL METHODS: KEEP SPILL OUT OF MUNICIPAL SEWERS AND OPEN BODIES OF WATER.
USE UNTIL LESS THAN 1 INCH REMAINS IN CONTAINER, EMPTY CONTAINER
TRIPLE RINSE WITH WATER, ADD TO OPERATION
REMOVE OR DEFACE LABEL BEFORE SELLING CONTAINER OR DISPOSAL

MATERIAL SAFETY DATA SHEET

QUICK IDENTIFIER ▶ PERJ 11381

CUSTOMER NAME AND ADDRESS

WESTINGHOUSE MATERIALS CO OF OHIO
P.O. BOX 398704
CINTI, OH 45239

ATTN: ATTN: FULTZ

MANUFACTURER'S NAME & ADDRESS

DuBOIS CHEMICALS
DIV. OF CHEMED CORP. 216
3630 E. KEMPER ROAD
SHARONVILLE, OHIO 45241

EMERGENCY PHONE NO 513-769-4200

REFERENCE SEQ # 693

PREPARED BY W. J. CORBETT ON 09/16/86

ABBREVIATIONS..C-CEILING..MP-MAXIMUM PEAK..N/A-NOT APPLICABLE..N/K-NOT KNOWN..P-POTENTIAL..PEL-PERMISSIBLE EXPOSURE LIMIT..PM-PENSKY MARTENS..S-SKIN..ST-SHORT TERM..TLV-THRESHOLD LIMIT VALUE..TWA-TIME WEIGHTED AVERAGE..

SECTION 1 – IDENTITY

COMMON NAME USED ON LABEL PERJ CODE 03240

CHEMICAL FAMILY WATER WASH PAINT BOOTH CLEANER

SECTION 2 – HAZARDOUS INGREDIENTS (ONLY ITEMS LISTED ARE HAZARDOUS BY TITLE 29CFR 1910.1200)

PRINCIPAL HAZARDOUS COMPONENT(S) CHEMICAL & COMMON NAME	%	EXPOSURE LIMITS (TWA 8 HOUR UNLESS OTHERWISE SPECIFIED)	UNITS
SODIUM HYDROXIDE	<70	TLV C 2; PEL 2	MG/M3

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS (FIRE & EXPLOSION DATA)

BOILING POINT NONE °F | SPECIFIC GRAVITY 1.15 | VAPOR PRESSURE N/A MMHg@ ° | VOLATILE BY VOLUME 10 %

VAPOR DENSITY AIR = 1 N/A | EVAPORATION RATE (n-BUTYL ACETATE=1) <1 | SOLUBILITY IN WATER 20 % | REACTIVITY / HEAT IN WATER / EVOLUTION MODERATE

APPEARANCE & ODOR WHITE OR OFF-WHITE POWDER; MILD ODOR.

FLASH POINT NONE °F | FLAME EXTENSION N/A in. | FLAMMABLE LIMITS IN AIR BY VOLUME LOWER NONE UPPER NONE | AUTO IGNITION TEMPERATURE N/A °F

EXTINGUISHER MEDIA CO2, DRY CHEMICALS

FIREFIGHTING SPECIAL PROCEDURES NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS NONE

SECTION 4 – PHYSICAL HAZARDS

STABILITY STABLE | POLYMERIZATION NONE | INCOMPATABLE WITH MINERAL ACIDS

DECOMPOSITION PRODUCTS CO WITH INCOMPLETE COMBUSTION

SECTION 5 – HEALTH HAZARDS

PRIMARY ROUTES OF ENTRY INHALATION YES SKIN NO INGESTION YES

SIGNS AND SYMPTOMS OF OVEREXPOSURE
1. ACUTE: CORROSIVE TO SKIN AND EYES
DUSTS ARE CORROSIVE TO SKIN, EYES AND RESPIRATION
2. CHRONIC: SAME AS ACUTE

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE SENSITIVE SKIN

LISTED CARCINOGEN NONE NTP NO IARC NO OSHA NO

EMERGENCY AND FIRST AID PROCEDURES

1. INHALATION N/A IN NORMAL OPERATION
2. EYES FLUSH THOROUGHLY WITH FRESH WATER, GET MEDICAL ATTENTION
3. SKIN FLUSH WITH FRESH WATER, WASH WITH SOAP AND WATER
REMOVE CONTAMINATED CLOTHES AND SHOES
4. INGESTION GIVE MILK, WATER OR EGG WHITES
DO NOT INDUCE VOMITING, GET MEDICAL ATTENTION

SECTION 6 – SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION NONE | VENTILATION LOCAL YES

VENTILATION MECHANICAL NO | SPECIAL NONE

PROTECTIVE GLOVES ALKALI RESISTANT | EYE PROTECTION FACE SHIELD

OTHER PROTECTIVE CLOTHING/EQUIPMENT NONE

SECTION 7 – SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

HANDLING AND STORAGE PRECAUTIONS NO SPECIAL SEPARATION OR STORAGE AREA. KEEP COVER ON DRUM.

OTHER PRECAUTIONS DOT CORROSIVE UN 1759 6

IF MATERIAL IS RELEASED/SPILLED SWEEP UP LARGE QUANTITIES; FLUSH SMALL AMOUNTS TO DRAIN.

WASTE DISPOSAL METHODS CONTAINS NO PHOSPHATES. ADJUST ALKALINITY AND SEPARATE INSOLUBLES
USE UNTIL LESS THAN 1 INCH REMAINS IN CONTAINER, EMPTY CONTAINER
TRIPLE RINSE WITH WATER, ADD TO OPERATION
REMOVE OR DEFACE LABEL BEFORE SELLING CONTAINER OR DISPOSAL

MATERIAL SAFETY DATA SHEET

QUICK IDENTIFIER ▶ D-TAC 11379

CUSTOMER NAME AND ADDRESS

WESTINGHOUSE MATERIALS CO OF OHIO
P.O. BOX 398704
CINTI, OH 45239

ATTN: ATTN: FULTZ

MANUFACTURER'S NAME & ADDRESS

DuBOIS CHEMICALS
DIV. OF CHEMED CORP 216
3630 E. KEMPER ROAD
SHARONVILLE, OHIO 45241

EMERGENCY PHONE 513-703-420

REFERENCE SEC # 69

PREPARED BY W. J. CORBETT ON 07/29/8

ABBREVIATIONS ..C-CEILING..MP-MAXIMUM PEAK..N/A-NOT APPLICABLE..N/K-NOT KNOWN..P-POTENTIAL..PEL-PERMISSIBLE EXPOSURE LIMIT..PM-PENSKY MARTENS..S-SKIN..ST-SHORT TERM..TLV-THRESHOLD LIMIT VALUE..TWA-TIME WEIGHTED AVERAGE..

SECTION 1 – IDENTITY

COMMON NAME USED ON LABEL D-TAC CODE 01050

CHEMICAL FAMILY LIQUID PAINT BOOTH CHEMICAL

SECTION 2 – HAZARDOUS INGREDIENTS (ONLY ITEMS LISTED ARE HAZARDOUS BY TITLE 29CFR 1910.1200)

PRINCIPAL HAZARDOUS COMPONENT(S) CHEMICAL & COMMON NAME	%	EXPOSURE LIMITS (TWA 8 HOUR UNLESS OTHERWISE SPECIFIED)	UNIT
PHOSPHORIC ACID	<25	TLV 1; PEL 1; ST 3.	MG/M.

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS (FIRE & EXPLOSION DATA)

BOILING POINT 212 °F | SPECIFIC GRAVITY 1.40 | VAPOR PRESSURE 17.5 MMHg@ 20 °C | VOLATILE BY VOLUME 50 %

VAPOR DENSITY AIR = 1 NA | EVAPORATION RATE (n-BUTYL ACETATE=1) >1 | SOLUBILITY IN WATER 100 % | REACTIVITY / HEAT IN WATER / EVOLUTION NONE

APPEARANCE & ODOR RED-BROWN CLEAR LIQUID;NONE

FLASH POINT NONE °F | FLAME EXTENSION N/A in. | FLAMMABLE LIMITS IN AIR BY VOLUME LOWER NONE UPPER NONE | AUTO IGNITION TEMPERATURE N/A °F

EXTINGUISHER MEDIA H2O,CO2

FIREFIGHTING SPECIAL PROCEDURES OVERALL COVER OF PERSONNEL IF VAPORS OF PRODUCT ARE ENCOUNTERED.

UNUSUAL FIRE AND EXPLOSION HAZARDS LIQUID PRODUCED HYDROGEN IN CONTACT WITH METALS.

SECTION 4 – PHYSICAL HAZARDS

STABILITY STABLE | POLYMERIZATION NONE | INCOMPATABLE WITH CONCERTED ALKALIS

DECOMPOSITION PRODUCTS CO WITH INCOMPLETE COMBUSTION

SECTION 5 – HEALTH HAZARDS

PRIMARY ROUTES OF ENTRY INHALATION YES SKIN NO INGESTION YES

SIGNS AND SYMPTOMS OF OVEREXPOSURE
1. ACUTE: IRRITATES EYES/DEFATS SKIN
MISTS ARE CORROSIVE TO SKIN, EYES AND RESPIRATION.
2. CHRONIC: SAME AS ACUTE

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE SENSITIVE SKIN

LISTED CARCINOGEN NONE NTP NO IARC NO OSHA NO

EMERGENCY AND FIRST AID PROCEDURES

1. INHALATION N/A;NOT NORMAL TO USE PATTERN.
2. EYES FLUSH THOROUGHLY WITH FRESH WATER, GET MEDICAL ATTENTION
3. SKIN FLUSH WITH FRESH WATER, WASH WITH SOAP AND WATER
REMOVE CONTAMINATED CLOTHES AND SHOES
4. INGESTION GIVE MILK, WATER, EGG WHITES OR A TEASPOON OF MILK OF MAGNESIA
INDUCE VOMITING, GET MEDICAL ATTENTION

SECTION 6 – SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION NONE | VENTILATION LOCAL YES

VENTILATION MECHANICAL NO | SPECIAL NONE

PROTECTIVE GLOVES ACID RESISTANT | EYE PROTECTION FACE SHIELD

OTHER PROTECTIVE CLOTHING/EQUIPMENT NONE

SECTION 7 – SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

HANDLING AND STORAGE PRECAUTIONS
KEEP FROM FREEZING
IF FROZEN RETURN TO PRODUCING PLANT
KEEP CONTAINER CLOSED
DO NOT PRESSURE CONTAINER TO EMPTY

7

OTHER PRECAUTIONS DOT CORROSIVE: NA 1760 CAUTIONS ON CONTAINER LABEL

IF MATERIAL IS RELEASED/SPILLED
COLLECT ON FLOOR DRY MATERIAL
NEUTRALIZE WITH SODIUM BICARBONATE

WASTE DISPOSAL METHODS
PH ADJUSTMENT FOLLOWED BY SLUDGING AND SEPARATION OF INSOLUBLES;
CONTAINS PHOSPHATES AND ZINC IONS.
USE UNTIL LESS THAN 1 INCH REMAINS IN CONTAINER, EMPTY CONTAINER
TRIPLE RINSE WITH WATER, DISPOSE TO INDUSTRIAL OR SANITARY SEWER
REMOVE OR DEFACE LABEL BEFORE SELLING CONTAINER OR DISPOSAL

MATERIAL SAFETY DATA SHEET

QUICK IDENTIFIER ▶ DEPRESS 14 — 11382

CUSTOMER NAME AND ADDRESS

WESTINGHOUSE MATERIALS CO OF OHIO
P.O. BOX 398704
CINTI, OH 45239

ATTN: ATTN: FOLTZ

MANUFACTURER'S NAME & ADDRESS

DuBOIS CHEMICALS
DIV. OF CHEMED CORP. 216
3630 E. KEMPER ROAD
SHARONVILLE, OHIO 45241

EMERGENCY PHONE 513-769-4200

REFERENCE SEQ # 693

PREPARED BY W. J. CORBETT ON 09/25/86

ABBREVIATIONS ..C-CEILING..MP-MAXIMUM PEAK..N/A-NOT APPLICABLE..N/K-NOT KNOWN..P-POTENTIAL..PEL-PERMISSIBLE EXPOSURE LIMIT..PM-PENSKY MARTENS..S-SKIN..ST-SHORT TERM..TLV-THRESHOLD LIMIT VALUE..TWA-TIME WEIGHTED AVERAGE..

SECTION 1 — IDENTITY

COMMON NAME USED ON LABEL: DEPRESS 14 — CODE: 01136

CHEMICAL FAMILY: FOAM CONTROL AGENT

SECTION 2 — HAZARDOUS INGREDIENTS (ONLY ITEMS LISTED ARE HAZARDOUS BY TITLE 29CFR 1910.1200)

PRINCIPAL HAZARDOUS COMPONENT(S) CHEMICAL & COMMON NAME	%	EXPOSURE LIMITS (TWA 8 HOUR UNLESS OTHERWISE SPECIFIED)	UNITS
PETROLEUM DISTILLATE	<45	TLV 400; PEL 500	PPM
CYCLOHEXANOL	<8	50 TLV; 50 PEL	PPM

SECTION 3 — PHYSICAL & CHEMICAL CHARACTERISTICS (FIRE & EXPLOSION DATA)

BOILING POINT >300 °F — SPECIFIC GRAVITY 0.842 — VAPOR PRESSURE <2 MMHg@ 20 °C — VOLATILE BY VOLUME 0 %

VAPOR DENSITY AIR = 1 UNK — EVAPORATION RATE (n-BUTYL ACETATE=1) <1 — SOLUBILITY IN WATER <1 % — REACTIVITY / HEAT IN WATER / EVOLUTION NONE

APPEARANCE & ODOR: BROWN LIQUID; SOLVENT ODOR

FLASH POINT 135 °F TCC — FLAME EXTENSION N/A in. — FLAMMABLE LIMITS IN AIR BY VOLUME LOWER NONE UPPER NONE — AUTO IGNITION TEMPERATURE N/A °F

EXTINGUISHER MEDIA: NORMAL TO PAINT BOOTH

FIREFIGHTING SPECIAL PROCEDURES: NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

SECTION 4 — PHYSICAL HAZARDS

STABILITY: STABLE — POLYMERIZATION: NONE — INCOMPATABLE WITH: NONE KNOWN

DECOMPOSITION PRODUCTS: CO WITH INCOMPLETE COMBUSTION

SECTION 5 — HEALTH HAZARDS

PRIMARY ROUTES OF ENTRY: INHALATION YES — SKIN NO — INGESTION YES

SIGNS AND SYMPTOMS OF OVEREXPOSURE
1. ACUTE: DIZZINESS/DEFATS SKIN/IRRITATES EYES
2. CHRONIC: SAME AS ACUTE

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: SENSITIVE SKIN

LISTED CARCINOGEN: NONE — NTP NO — IARC NO — OSHA NO

EMERGENCY AND FIRST AID PROCEDURES

1. INHALATION: N/A
2. EYES: FLUSH THOROUGHLY WITH FRESH WATER, GET MEDICAL ATTENTION
3. SKIN: FLUSH WITH FRESH WATER, WASH WITH SOAP AND WATER
   REMOVE CONTAMINATED CLOTHES AND SHOES
4. INGESTION: GIVE MILK, WATER OR EGG WHITES
   DO NOT INDUCE VOMITING, GET MEDICAL ATTENTION

SECTION 6 — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NONE — VENTILATION LOCAL: YES

VENTILATION MECHANICAL: NO — SPECIAL: NONE

PROTECTIVE GLOVES: SOLVENT RESISTANT — EYE PROTECTION: FACE SHIELD

OTHER PROTECTIVE CLOTHING/EQUIPMENT: NONE

SECTION 7 — SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

HANDLING AND STORAGE PRECAUTIONS: NO SPECIAL SEPARATION. KEEP DRUM CLOSED.
DO NOT PRESSURE CONTAINER TO EMPTY.

8

OTHER PRECAUTIONS: VOLUNTARY; CAUTIONS ON CONTAINER LABEL.

IF MATERIAL IS RELEASED/SPILLED: COLLECT SMALL AMOUNTS WITH FLOUR DRY MATERIAL AND DISPOSE TO SOLID WASTE; COLLECT AND RETURN LARGE AMOUNTS TO CONTAINER

WASTE DISPOSAL METHODS: USE UNTIL LESS THAN 1 INCH REMAINS IN CONTAINER, EMPTY CONTAINER
TRIPLE RINSE WITH WATER, ADD TO OPERATION
REMOVE OR DEFACE LABEL BEFORE SELLING CONTAINER OR DISPOSAL
SEPARATION OF INSOLUBLES; MATERIAL CAN BE BURNED

B. —

MATERIAL SAFETY DATA SHEET
FOR COATINGS AND RELATED MATERIALS

216 /0723

MANUFACTURER'S NAME: CINCINNATI VARNISH CO.
ADDRESS: 1776 MENTOR AVENUE
CINCINNATI, OHIO 45212

DATE OF PREPARATION: 11/09/87
EMERGENCY AND INFORMATION
TELEPHONE NUMBER: (513) 631-

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER: 38295 TRADE NAME: NOT APPLICABLE
PRODUCT NAME: BLACK W/R DRUM ENAMEL

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	OCCUPATIONAL EXPOSURE LIMITS TLV(TWA)	STEL	VAPOR PRESSURE MM HG/DEG F	TOXICITY DATA
DIMETHYLETHANOLAMINE (CAS NO.-108-01-0)	< 5	NOT ESTABLISHED		4/68	———
ETHYLENE GLYCOL MONOPROPYL ETHER (CAS NO.-2807-30-9)	< 5	NOT ESTABLISHED		1.3/77	———
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS NO.-111-76-2)	5	25PPM (SKIN)	N/E	0.6/68	———
HEXAMETHOXYMETHYLMELAMINE	< 5	NOT ESTABLISHED		N/A	———
SECONDARY BUTANOL (CAS NO.-78-92-2)	5	100PPM	N/E	40/100	———

SECTION III - PHYSICAL DATA

BOILING RANGE: 165 - 336 DEG F
EVAPORATION RATE: SLOWER THAN ETHER
VAPOR DENSITY: HEAVIER THAN AIR
PERCENT VOLATILE VOLUME 71.4
V O C: 2.67 LBS/GAL
W/GAL: 8.50 LBS/GAL

SECTION IV - FIRE AND EXPLOSION DATA

FLAMMABILITY CLASSIFICATION (OSHA): COMBUSTIBLE LIQUID - CLASS II

FLASH POINT: 133 DEG F(SETAFLASH) LEL: 1.1

EXTINGUISHING MEDIA: USE FOAM AND/OR CO2 AND/OR DRY CHEMICAL

UNUSUAL FIRE AND EXPLOSION HAZARDS: KEEP CONTAINER TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT.

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND TO POTENTIAL IGNITION SOURCES AWAY FROM THE MATERIAL HANDLING POINT SUCH AS PILOT LIGHTS.

-

SPECIAL FIREFIGHTING PROCEDURES: WATER MAY BE UNSUITABLE (SEE EXTINGUISHING MEDIA). WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE EXPLOSION WHEN EXPOSED TO EXTREME HEAT.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: ACUTE: INHALATION: IRRITATION OF THE RESPIRATORY TRACT IS POSSIBLE. OVEREXPOSURE MAY PRODUCE AN ANESTHETIC EFFECT.

SKIN OR EYE CONTACT: IRRITANT

LIQUID CAN BE A SEVERE IRRITANT TO THE EYES.

DIMETHYLETHANOLAMINE CAN BE ABSORBED IN TOXIC AMOUNTS, THROUGH PROLONGED OR REPEATED EXPOSURE

ETHYLENE GLYCOL MONOPROPYL ETHER CAN BE ABSORBED IN TOXIC AMOUNTS, THROUGH PROLONGED OR REPEATED EXPOSURE

ETHYLENE GLYCOL MONOBUTYL ETHER CAN BE ABSORBED IN TOXIC AMOUNTS, THROUGH PROLONGED OR REPEATED EXPOSURE

SECONDARY BUTANOL LIQUID WILL DAMAGE EYE TISSUE

HEXAMETHOXYMETHYLMELAMINE MAY PRODUCE AN ALLERGIC RESPONSE,RESULTING IN DERMATITIS, IN CERTAIN (ALLERGIC)

PERSONS.

CHRONIC: OVEREXPOSURE TO ETHYLENE GLYCOL MONOBUTYL ETHER HAS APPARENTLY BEEN FOUND TO CAUSE ANEMIA LIVER ABNORMALITIES, BLOOD ABNORMALITIES AND DAMAGE TO THE KIDNEYS AND LUNGS IN TESTING OF LABORATORY ANIMALS

SEE ADDITIONAL PRECAUTIONS, SECTION IX

PRIMARY ROUTES OF ENTRY: INHALATION AND/OR DERMAL

EMERGENCY FIRST AID PROCEDURES:

INHALATION: REMOVE TO FRESH AIR.

SPLASH (EYES): FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. TAKE TO A PHYSICIAN FOR MEDICAL TREATMENT,IF IRRITATION PERSISTS.

SPLASH (SKIN): WASH WITH SOAP AND WATER. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.

INGESTION: DO NOT INDUCE VOMITING. CONSULT A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

SECTION VI - REACTIVITY DATA

STABILITY: STABLE CONDITIONS TO AVOID: UNKNOWN

INCOMPATIBILITY (MATERIALS TO AVOID): OXIDIZING AGENTS, ACIDS.

HAZARDOUS DECOMPOSITION PRODUCTS: MAY PRODUCE FUMES IF HEATED TO DECOMPOSITION. FUMES MAY CONTAIN CARBON MONOXIDE,CARBON DIOXIDE, METHANOL,AMMONIA,FORMALDEHYDE, NITROGEN OXIDES, NITROGEN OXIDES, SULFUR OXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VII - SPILL OR LEAK PROCEDURES

216

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:	VENTILATE AREA. REMOVE OR EXTINGUISH POTENTIAL IGNITION SOURCES. REMOVE WITH INERT ABSORBENT OR RAGS. CAUTION: PAINT SATURATED RAGS CONSTITUTE A SPONTANEOUS COMBUSTION HAZARD. BEFORE BEGINNING CLEAN-UP, REFER TO HAZARD CAUTIONS IN OTHER SECTIONS OF THIS SHEET.
WASTE DISPOSAL METHOD:	DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII - SPECIAL PROTECTION INFORMATION

VENTILATION:	VENTILATE ADEQUATELY TO RELIEVE IRRITATING VAPORS OR ODORS.
EYE PROTECTION:	EYE COVERING,TO PROTECT AGAINST LIQUID SPLASH,IS SUGGESTED.
OTHER PROTECTIVE EQUIPMENT:	PROTECTIVE CAP AND COVERABLES ARE SUGGESTED.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:	KEEP CLOSURE TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKING.
	ALL CONTAINERS SHOULD BE GROUNDED WHEN HANDLING OR TRANSFERRING
	CONTAINS WATER - DO NOT FREEZE.
OTHER PRECAUTIONS:	DO NOT GET IN EYES. AVOID PROLONGED SKIN CONTACT.
	THE HEXAMETHOXYMETHYLMELAMINE RESIN EMPLOYED MAY CONTAIN 0.5% (MAX.-WEIGHT) FORMALDEHYDE. FORMALDEHYDE (CAS NO.50-00-0) HAS A TLV OF 3PPM(OSHA). FORMALDEHYDE HAS BEEN SHOWN TO CAUSE CANCER IN LABORATORY ANIMALS.

EXPLANATION AND DEFINITIONS

CINCINNATI VARNISH CO. ALSO MANUFACTURES COATINGS UNDER THE NAME OF JASPER CHEMICAL COATINGS (LACQUER DIVISION).

216

JASPER CHEMICAL COATINGS MAY BE CONTACTED:

JASPER CHEMICAL COATINGS
1014 VINE STREET
P.O. BOX 27
JASPER, INDIANA 47546
812-482-2863

SWITCHBOARD HOURS:
CINCINNATI - 7:30 A - 5:00 P (EASTERN TIME) *
JASPER - 8:00 A - 5:00 P (EASTERN TIME) *
* CINCINNATI OBSERVES DAYLIGHT SAVINGS TIME, DURING APPROPRIATE TIME OF YEAR. JASPER DOES NOT.
(THE NUMBER ON THE MSDS IS ANSWERED 24 HOURS A DAY FOR "EMERGENCIES.")

SECTION I PRODUCT IDENTIFICATION

PRODUCT NUMBERS AND NAMES WILL APPEAR EXACTLY AS THEY APPEAR ON CONTAINERS. TO AVOID ANY POSSIBLE CONFUSION, ABBREVIATIONS USED ON CONTAINER LABELS WILL BE USED HERE.

SECTION II HAZARDOUS INGREDIENTS

MATERIALS LISTED HERE ARE THOSE COMPONENTS OF THE FORMULATION WHICH POSE ANY PHYSICAL OR HEALTH HAZARD AS DEFINED BY THE CRITERIA ESTABLISHED BY OSHA IN THE HAZARD COMMUNICATION FINAL STANDARD(29CFR1910.1200) OR ARE LISTED AS "TOXIC CHEMICALS" AND REPORTABLE UNDER SARA TITLE III, SEC. 313. ALL SUCH MATERIALS CONTAINED IN AMOUNTS GREATER THAN 1% (WEIGHT) ARE LISTED. MATERIALS KNOWN TO PRESENT PARTICULAR HAZARDS,LEAD AND KNOWN OR SUSPECTED CARCINOGENS-FOR EXAMPLE, ARE LISTED IF CONTAINED IN ANY QUANTITY. THE HAZARDOUS MATERIAL DESCRIPTION IS GENERALLY STRAIGHT FORWARD. HOWEVER, IT IS OCCASIONALLY NECESSARY, FOR TOTAL CLARITY, TO DEFINE THE TYPE RAW MATERIAL CARRYING THE HAZARDOUS MATERIAL. EXAMPLES OF THE TECHNIQUE EMPLOYED TO ACCOMPLISH THIS:

LEAD (METALLIC DRIER)
CHROMATE (CHROME GREEN PIGMENT)

IN THE FIRST INSTANCE LEAD IS THE HAZARDOUS MATERIAL, CONTAINED IN A METALLIC DRIER USED IN A FORMULA. IN THE SECOND CASE, THE HAZARD IS PRESENTED BY CHROMATE-CONTAINED IN A CHROME GREEN PIGMENT USED.

CHEMICAL ABSTRACT SERVICE NUMBERS (CAS NOS) ARE PRINTED, JUST BELOW THE CHEMICAL NAME, FOR ALL MATERIALS FOR WHICH WE HAVE THEM.

THE AMOUNT OF THE HAZARDOUS INGREDIENT CONTAINED IN THE FORMULA IS FOUND UNDER THE HEADING "PERCENT BY WEIGHT". THE PER-CENT LISTED IS % BY WEIGHT ON TOTAL WEIGHT; DETERMINED BY THEORETICAL CALCULATION.

OCCUPATIONAL EXPOSURE LIMITS ARE REPORTED NEXT; USING THOSE ESTABLISHED BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENE (ACGIH TLV) AND OSHA(PEL).

VAPOR PRESSURE IS REPORTED IN MM HG/DEG F AS:

6/106

MEANING 6 MM HG @ 106 DEG F.

(ONLY IN THESE TWO SECTIONS, OCCUPATIONAL EXPOSURE LIMITS AND VAPOR PRESSURE, ARE ABBREVIATIONS USED -- FOR SPACE CONSIDERATIONS. N/A SYMBOLIZING "NOT APPLICABLE" AND N/E FOR "NOT ESTABLISHED".)

THE TOXICITY DATA SECTION WILL REPORT ANY ADDITIONAL TOXICITY DATA WE HAVE ON THE MATERIAL, SUCH AS LD 50, LC 50, - POISON, ETC.

VAPOR PRESSURE IS REPORTED IN MM HG/DEG F AS:

6/106

MEANING 6 MM HG @ 106 DEG F.

(ONLY IN THESE TWO SECTIONS, OCCUPATIONAL EXPOSURE LIMITS AND VAPOR PRESSURE, ARE ABBREVIATIONS USED — FOR SF CONSIDERATIONS. N/A SYMBOLIZING "NOT APPLICABLE" AND N/E FOR "NOT ESTABLISHED".)

THE TOXICITY DATA SECTION WILL REPORT ANY ADDITIONAL TOXICITY DATA WE HAVE ON THE MATERIAL, SUCH AS LD 50, LC 5 POISON, ETC.

SECTION III PHYSICAL DATA

THE BOILING RANGE REPORTED IS THAT COVERED BY THE FORMULATIONS TOTAL VOLATILE COMPONENTS - REGARDLESS OF THE AM SPECIFIC TO EACH.

THE PER-CENT VOLATILE VOLUME IS A CALCULATED THEORETICAL FIGURE. A RANGE OF PLUS OR MINUS 1.0% MAY BE ASSUMED.

WEIGHT PER GALLON IS ALSO CALCULATED THEORETICAL. A RANGE OF PLUS OR MINUS 0.10 POUNDS IS NORMALLY ASSUMED BETW 7.0 AND 10.0 POUNDS, INCREASING AND DECREASING PROPORTIONALLY AND SLIGHTLY BEYOND THIS WEIGHT RANGE.

SECTION IV FIRE AND EXPLOSION DATA

THE FLAMMABILITY CLASSIFICATION, ESTABLISHED BY OSHA, IS GIVEN. THESE CLASSIFICATION CRITERIA ARE:

FP*(	73 DEG F AND BP*(	100 DEG F..	FLAMMABLE LIQUID CLASS IA
FP (	73 DEG F AND BP)	100 DEG F..	FLAMMABLE LIQUID CLASS IB
FP	73 DEG F BUT	(100 DEG F..	FLAMMABLE LIQUID CLASS IC
FP	100 DEG F BUT	(140 DEG F..	COMBUSTIBLE LIQUID CLASS II
FP	100 DEG F BUT	(200 DEG F..	COMBUSTIBLE LIQUID CLASS IIIA
FP	200 DEG F AND ABOVE	..	COMBUSTIBLE LIQUID CLASS IIIB

* FP - FLASH POINT • BP - BOILING POINT

THE REPORTED FLASH POINT OF THE MATERIAL IS EXPERIMENTALLY DETERMINED USING A SETAFLASH (CLOSED CUP) TESTER. SINCE THIS IS AN EXPERIMENTAL DETERMINATION, A BATCH-TO-BATCH RANGE OF PLUS OR MINUS 3 DEG F SHOULD BE ASSUMED.

THE LOWER EXPLOSIVE LIMIT (LEL) REPORTED IS THAT OF THE LOWEST OF ALL PERTINENT, CONTAINED MATERIALS: AGAIN DISREGARDING THE AMOUNT CONTAINED.

THE REMAINING SECTIONS OF THE FORM ARE TEXT AND REQUIRE NO EXPLANATION. WE WOULD, HOWEVER, LIKE TO CALL ATTENTIO TO ONE ASPECT. TO A LARGE EXTENT WE HAVE TRIED TO SPECIFY, REGARDING PRECAUTIONARY STATEMENTS, THE MATERIAL WHICH MAK THE STATEMENT PERTINENT. AGAIN, WE FEEL THIS WILL BE MOST USEFUL WHEN ASSESSING THE HAZARD POTENTIAL OF THE MIXTURE. IN OTHER WORDS IF A MIXTURE CONTAINS 5-10% OF A MATERIAL WHICH IS A POTENTIAL CHRONIC HEALTH HAZARD, THE CHRONIC HAZA OF THE WHOLE WOULD NOT NORMALLY BE ASSESSED AS TOO SEVERE. IF WE WERE TO PRINT ONLY THE APPLICABLE PRECAUTION, WITHOU SPECIFICALLY ATTRIBUTING ITS' SOURCE, READERS WOULD HAVE NO BASIS ON WHICH TO MAKE THIS TYPE ASSESSMENT AND WOULD HAVE TO ASSUME SEVERITY OF THE WHOLE. UTILIZING THIS APPROACH TO MAKING HAZARD ASSESSMENTS OF BLENDS IS AT THE DESCRETION O THE ASSESSOR.

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CINCINNATI VARNISH CO. BELIEVES THE INFORMATION CONTAINED HEREIN IS ACCURATE. HOWEVER, THE COMPANY ASSUMES NO LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION. ALL MATERIALS MAY PRESENT UNKNOWN HEALTH HAZARDS AND SHOULD BE USED WITH CAUTION. FINAL DETERMINATION OF SUITABILITY OF THE MATERIAL IS THE SOLE RESPONSIBILITY OF THE USER.

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Received Feb 1989

216

MATERIAL SAFETY DATA SHEET
FOR COATINGS AND RELATED MATERIALS

MANUFACTURER'S NAME: CINCINNATI VARNISH CO.
ADDRESS: 1776 MENTOR AVENUE
CINCINNATI, OHIO 45212

DATE OF PREPARATION: 2/22/89
EMERGENCY AND INFORMATION
TELEPHONE NUMBER: (513) 631-4

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER: 60662
PRODUCT NAME: CLEAR W/R DRUM LINER

TRADE NAME: NOT APPLICABLE

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT BY WEIGHT	OCCUPATIONAL EXPOSURE LIMITS TLV(TWA)	PEL(OSHA)	VAPOR PRESSURE MM HG/DEG F	TOXICITY DATA
**ETHYLENE GLYCOL MONOPROPYL ETHER (CAS NO.-2807-30-9)	1.8	NOT ESTABLISHED		1.3/77	———
**ETHYLENE GLYCOL MONOBUTYL ETHER (CAS NO.-111-76-2)	11.3	25PPM (SKIN)	50PPM	0.6/68	———
**HEXAMETHOXYMETHYLMELAMINE (CAS NO.-68002-20-0)	6.1	NOT ESTABLISHED		N/A	———
DIMETHYLETHANOLAMINE (CAS NO.-108-01-0)	1.8	NOT ESTABLISHED		4/68	———
ISOBUTYL ALCOHOL (CAS NO.-78-83-1)	2.2	50PPM	100PPM	8.8/68	———

** DESIGNATES MATERIAL SUBJECT TO REPORTING REQUIREMENTS OF SARA TITLE III, SEC. 313.
IF NONE ARE DESIGNATED, THIS PRODUCT CONTAINS NO REPORTABLE CHEMICALS.

SECTION III - PHYSICAL DATA

BOILING RANGE: 165 - 336 DEG F
EVAPORATION RATE: SLOWER THAN ETHER

VAPOR DENSITY: HEAVIER THAN AIR
PERCENT VOLATILE VOLUME 71.4

V O C: 3.04 LBS/GAL
W/GAL: 8.45 LBS/GAL

INDUSTRIAL HYGIENE
FEB 24 1 13 PM '89

SECTION IV - FIRE AND EXPLOSION DATA

FLAMMABILITY CLASSIFICATION (OSHA): COMBUSTIBLE LIQUID - CLASS II

FLASH POINT: 133 DEG F(SETAFLASH) LEL: 1.1

216

EXTINGUISHING MEDIA: USE FOAM AND/OR CO2 AND/OR DRY CHEMICAL

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

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND TO POTENTIAL IGNITION SOURCES AWAY FROM THE MATERIAL HANDLING POINT

NEVER USE WELDING OR CUTTING TORCHES ON OR NEAR CONTAINER EVEN WHEN EMPTY. RESIDUAL VAPOR MAY IGNITE EXPLOSIVELY.

SPECIAL FIREFIGHTING PROCEDURES: WATER MAY BE UNSUITABLE (SEE EXTINGUISHING MEDIA). WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE AUTOIGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT. IF WATER IS USED, FOG NOZZLES ARE PREFERRED. FULL PROTECTIVE EQUIPMENT, INCLUDING SELF-CONTAINED BREATHING APPARATUS, IS NEEDED TO PROTECT FROM ANY HAZARDOUS COMBUSTION PRODUCTS.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: ACUTE: INHALATION: ANESTHETIC. IRRITATION OF THE RESPIRATORY TRACT OR ACUTE NERVOUS SYSTEM DEPRESSION CHARACTERIZED BY THE FOLLOWING PROGRESSIVE STEPS:HEADACHE, DIZZINESS, STAGGERING, CONFUSION, UNCONSCIOUSNESS OR COMA.

SKIN OR EYE CONTACT: IRRITANT

LIQUID CAN BE A SEVERE IRRITANT TO THE EYES.

DIMETHYLETHANOLAMINE CAN BE ABSORBED IN TOXIC AMOUNTS, THROUGH PROLONGED OR REPEATED EXPOSURE

**ETHYLENE GLYCOL MONOPROPYL ETHER CAN BE ABSORBED IN TOXIC AMOUNTS, THROUGH PROLONGED OR REPEATED EXPOSURE

**ETHYLENE GLYCOL MONOBUTYL ETHER CAN BE ABSORBED IN TOXIC AMOUNTS, THROUGH PROLONGED OR REPEATED EXPOSURE

**HEXAMETHOXYMETHYLMELAMINE MAY PRODUCE AN ALLERGIC RESPONSE,RESULTING IN DERMATITIS ,IN CERTAIN (ALLERGIC) PERSONS.

CHRONIC: OVEREXPOSURE TO **ETHYLENE GLYCOL MONOBUTYL ETHER HAS APPARENTLY BEEN FOUND TO CAUSE LIVER ABNORMALITIES, BLOOD ABNORMALITIES AND DAMAGE TO THE KIDNEYS AND LUNGS IN TESTING OF LABORATORY ANIMALS.

SEE ADDITIONAL PRECAUTIONS, SECTION IX

PRIMARY ROUTES OF ENTRY: INHALATION AND/OR DERMAL

EMERGENCY FIRST AID PROCEDURES:

INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING AS NECESSARY.

SPLASH (EYES): FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. TAKE TO A PHYSICIAN FOR MEDICAL TREATMENT.

SPLASH (SKIN): WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.

INGESTION: DO NOT INDUCE VOMITING. CONSULT A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.

SECTION VI - REACTIVITY DATA

STABILITY: STABLE CONDITIONS TO AVOID: UNKNOWN

INCOMPATIBILITY (MATERIALS TO AVOID): OXIDIZING AGENTS, ACIDS.

HAZARDOUS DECOMPOSITION PRODUCTS: MAY PRODUCE FUMES IF HEATED TO DECOMPOSITION. FUMES MAY CONTAIN CARBON MONOXIDE,CARBON DIOXIDE, METHANOL,AMMONIA,FORMALDEHYDE, NITROGEN OXIDES, NITROGEN OXIDES, SULFUR OXIDES.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:	REMOVE ALL POTENTIAL SOURCES OF IGNITION (FLAMES, HOT SURFACES, ELECTRICAL, STATIC AND/OR FRICTIONAL SPARKS), AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT USING NON-SPARKING TOOLS. BEFORE BEGINNING CLEAN-UP, REFER TO HAZARD CAUTIONS IN OTHER SECTIONS OF THIS SHEET.
WASTE DISPOSAL METHOD:	DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:	OUTDOOR OR OPEN AREAS - USE APPROVED MECHANICAL FILTER RESPIRATOR TO REMOVE SOLID AIRBORNE PARTICULATES OF OVERSPRAY DURING SPRAY APPLICATION. RESTRICTED VENTILATION AREAS - USE APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF VAPORS AND PARTICULATES. CONFINED AREAS - USE APPROVED AIR LINE TYPE RESPIRATORS OR HOODS.
VENTILATION:	PROVIDE SUFFICIENT VOLUME AND PATTERN TO MAINTAIN TLV-TWA BELOW ACCEPTABLE LIMITS (SEE SECTION II). ELIMINATE IGNITION SOURCE IF FLAMMABLE MIXTURES WILL BE ENCOUNTERED.
PROTECTIVE GLOVES:	REQUIRED FOR PROLONGED OR REPEATED CONTACT.
EYE PROTECTION:	USE APPROVED SAFETY EYEWARE DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.
OTHER PROTECTIVE EQUIPMENT:	PROTECTIVE CAP AND COVERABLES ARE RECOMMENDED. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE RE-USE. WEAR CHEMICAL AND SOLVENT RESISTANT SHOES.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:	KEEP CLOSURE TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKING. STORE CONTAINERS OUT OF SUN AND AWAY FROM HEAT. ALL CONTAINERS SHOULD BE GROUNDED WHEN HANDLING OR TRANSFERRING CONTAINS WATER - DO NOT FREEZE.
OTHER PRECAUTIONS:	DO NOT GET IN EYES. AVOID SKIN CONTACT. PREVENT PROLONGED OR REPEATED BREATHING OF VAPOR OR SPRAY MIST. THE HEXAMETHOXYMETHYLMELAMINE RESIN EMPLOYED MAY CONTAIN 0.5% (MAX.-WEIGHT) FORMALDEHYDE. FORMALDEHYDE (CAS NO.50-00-0) HAS A PEL OF 1PPM(OSHA). FORMALDEHYDE HAS BEEN SHOWN TO CAUSE CANCER IN LABORATORY ANIMALS.

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

EXPLANATION AND DEFINITIONS

CINCINNATI VARNISH CO. ALSO MANUFACTURES COATINGS UNDER THE NAME OF JASPER CHEMICAL COATINGS (LACQUER DIVISION)

JASPER CHEMICAL COATINGS MAY BE CONTACTED:

JASPER CHEMICAL COATINGS
1014 VINE STREET
P.O. BOX 27
JASPER, INDIANA 47546
812-482-2863

SWITCHBOARD HOURS:
CINCINNATI - 7:30 A - 5:00 P (EASTERN TIME) *
JASPER - 8:00 A - 5:00 P (EASTERN TIME) *
* CINCINNATI OBSERVES DAYLIGHT SAVINGS TIME, DURING APPROPRIATE TIME OF YEAR. JASPER DOES NOT.
(THE NUMBER ON THE MSDS IS ANSWERED 24 HOURS A DAY FOR "EMERGENCIES.")

SECTION I PRODUCT IDENTIFICATION

PRODUCT NUMBERS AND NAMES WILL APPEAR EXACTLY AS THEY APPEAR ON CONTAINERS. TO AVOID ANY POSSIBLE CONFUSION, ABBREVIATIONS USED ON CONTAINER LABELS WILL BE USED HERE.

SECTION II HAZARDOUS INGREDIENTS

MATERIALS LISTED HERE ARE THOSE COMPONENTS OF THE FORMULATION WHICH POSE ANY PHYSICAL OR HEALTH HAZARD AS DEFIN BY THE CRITERIA ESTABLISHED BY OSHA IN THE HAZARD COMMUNICATION FINAL STANDARD (29CFR1910.1200). ALL SUCH MATERIALS CONTAINED IN AMOUNTS GREATER THAN 1% (VOLUME) ARE LISTED. MATERIALS KNOWN TO PRESENT PARTICULAR HAZARDS, LEAD AND KNOWN OR SUSPECTED CARCINOGENS - FOR EXAMPLE, ARE LISTED IF CONTAINED IN ANY QUANTITY. THE HAZARDOUS MATERIAL DESCRIPTION IS GENERALLY STRAIGHT FORWARD. HOWEVER, IT IS OCCASIONALLY NECESSARY, FOR TOTAL CLARITY, TO DEFINE THE TYPE RAW MATERIAL CARRYING THE HAZARDOUS MATERIAL. EXAMPLES OF THE TECHNIQUE EMPLOYED TO ACCOMPLISH THIS:

LEAD (METALLIC DRIER)
CHROMATE (CHROME GREEN PIGMENT)

IN THE FIRST INSTANCE LEAD IS THE HAZARDOUS MATERIAL, CONTAINED IN A METALLIC DRIER USED IN A FORMULA. IN THE SECOND CASE, THE HAZARD IS PRESENTED BY CHROMATE-CONTAINED IN A CHROME GREEN PIGMENT USED.

CHEMICAL ABSTRACT SERVICE NUMBERS (CAS NOS) ARE PRINTED, JUST BELOW THE CHEMICAL NAME, FOR ALL MATERIALS FOR WHICH WE HAVE THEM.

THE AMOUNT OF THE HAZARDOUS INGREDIENT CONTAINED IN THE FORMULA IS FOUND UNDER THE HEADING PERCENT. THE PER-CE LISTED IS % BY VOLUME ON TOTAL VOLUME; UNLESS DESIGNATED BY THE SYMBOL (W) NEXT TO THE LISTING. (W) INDICATES THAT THE AMOUNT IS % BY WEIGHT ON THE TOTAL WEIGHT AND IS USED ONLY IN CASES WHERE VOLUMETRIC CONTRIBUTION CALCULATIONS ARE NOT POSSIBLE. IN EITHER CASE THE AMOUNT SHOWN IS A ROUNDED-OFF FIGURE (FROM CALCULATED THEORETICAL USING THE FOLLOWING GUIDE:

5 - 100% - THE NEAREST 5%
0.5 - 5% < 5%
0 - 0.5% < 0.5%

(UNDERSTANDING THIS PROCEDURE IS, OBVIOUSLY, A VITAL STEP IN YOUR ASSESSMENT OF THE HAZARDS PRESENTED BY THE " WHOLE " COATING.)

OCCUPATIONAL EXPOSURE LIMITS ARE REPORTED NEXT; TO AS GREAT AN EXTENT AS POSSIBLE USING THOSE ESTABLISHED BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENE (ACGIH).

THE BOILING RANGE REPORTED IS THAT COVERED BY THE FORMULATIONS TOTAL VOLATILE COMPONENTS - REGARDLESS OF THE AMOUNT SPECIFIC TO EACH.

THE PER-CENT VOLATILE VOLUME IS A CALCULATED THEORETICAL FIGURE. A RANGE OF PLUS OR MINUS 1.0% MAY BE ASSUMED.

WEIGHT PER GALLON IS ALSO CALCULATED THEORETICAL. A RANGE OF PLUS OR MINUS 0.10 POUNDS IS NORMALLY ASSUMED BETWEEN 7.0 AND 10.0 POUNDS, INCREASING AND DECREASING PROPORTIONALLY AND SLIGHTLY BEYOND THIS WEIGHT RANGE.

SECTION IV FIRE AND EXPLOSION DATA

THE FLAMMABILITY CLASSIFICATION, ESTABLISHED BY OSHA, IS GIVEN. THESE CLASSIFICATION CRITERIA ARE:

FP*<	73 DEG F AND BP*<	100 DEG F..FLAMMABLE	LIQUID CLASS IA
FP <	73 DEG F AND BP >	100 DEG F..FLAMMABLE	LIQUID CLASS IB
FP	73 DEG F BUT <	100 DEG F..FLAMMABLE	LIQUID CLASS IC
FP	100 DEG F BUT <	140 DEG F..COMBUSTIBLE	LIQUID CLASS II
FP	100 DEG F BUT <	200 DEG F..COMBUSTIBLE	LIQUID CLASS IIIA
FP	200 DEG F AND ABOVE	..COMBUSTIBLE	LIQUID CLASS IIIB

* FP - FLASH POINT * BP - BOILING POINT

THE REPORTED FLASH POINT OF THE MATERIAL IS EXPERIMENTALLY DETERMINED USING A SETAFLASH (CLOSED CUP) TESTER. SINCE THIS IS AN EXPERIMENTAL DETERMINATION, A BATCH-TO-BATCH RANGE OF PLUS OR MINUS 3 DEG F SHOULD BE ASSUMED.

THE LOWER EXPLOSIVE LIMIT (LEL) REPORTED IS THAT OF THE LOWEST OF ALL PERTINENT, CONTAINED MATERIALS: AGAIN DISREGARDING THE AMOUNT CONTAINED.

THE REMAINING SECTIONS OF THE FORM ARE TEXT AND REQUIRE NO EXPLANATION. WE WOULD, HOWEVER, LIKE TO CALL ATTENTION TO ONE ASPECT. TO A LARGE EXTENT WE HAVE TRIED TO SPECIFY, REGARDING PRECAUTIONARY STATEMENTS, THE MATERIAL WHICH MAKES THE STATEMENT PERTINENT. AGAIN, WE FEEL THIS WILL BE MOST USEFUL WHEN ASSESSING THE HAZARD POTENTIAL OF THE MIXTURE. IN OTHER WORDS IF A MIXTURE CONTAINS 5-10% OF A MATERIAL WHICH IS A POTENTIAL CHRONIC HEALTH HAZARD, THE CHRONIC HAZARD OF THE WHOLE WOULD NOT NORMALLY BE ASSESSED AS TOO SEVERE. IF WE WERE TO PRINT ONLY THE APPLICABLE PRECAUTION, WITHOUT SPECIFICALLY ATTRIBUTING ITS' SOURCE, READERS WOULD HAVE NO BASIS ON WHICH TO MAKE THIS TYPE ASSESSMENT AND WOULD HAVE TO ASSUME SEVERITY OF THE WHOLE. UTILIZING THIS APPROACH TO MAKING HAZARD ASSESSMENTS OF BLENDS IS AT THE DISCRETION OF THE ASSESSOR.

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MATERIAL SAFETY DATA SHEET
FOR COATINGS AND RELATED MATERIALS

MANUFACTURER'S NAME: CINCINNATI VARNISH CO.
ADDRESS: 1776 MENTOR AVENUE
CINCINNATI, OHIO 45212

DATE OF PREPARATION: 11/09/87
EMERGENCY AND INFORMATION
TELEPHONE NUMBER: (513) 631-42

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER: 38363
PRODUCT NAME: W/R RED DRUM ENAMEL

TRADE NAME: NOT APPLICABLE

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	OCCUPATIONAL EXPOSURE LIMITS TLV(TWA)	STEL	VAPOR PRESSURE MM HG/DEG F	TOXICITY DATA
DIMETHYLETHANOLAMINE (CAS NO.-108-01-0)	< 5	NOT ESTABLISHED		4/68	———
ETHYLENE GLYCOL MONOPROPYL ETHER (CAS NO.-2807-30-9)	< 5	NOT ESTABLISHED		1.3/77	———
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS NO.-111-76-2)	10	25PPM (SKIN)	N/E	0.6/68	———
HEXAMETHOXYMETHYLMELAMINE	< 5	NOT ESTABLISHED		N/A	———
ISOBUTYL ALCOHOL (CAS NO.-78-03-1)	< 5	50PPM	N/E	8.8/68	———

SECTION III - PHYSICAL DATA

BOILING RANGE: 165 - 336 DEG F
EVAPORATION RATE: SLOWER THAN ETHER

VAPOR DENSITY: HEAVIER THAN AIR
PERCENT VOLATILE VOLUME 68.9

V O C: 2.72 LBS/GAL
W/GAL: 8.78 LBS/GAL

SECTION IV - FIRE AND EXPLOSION DATA

FLAMMABILITY CLASSIFICATION (OSHA): COMBUSTIBLE LIQUID - CLASS II
FLASH POINT: 133 DEG F(GETAFLASH) LEL: 1.1

EXTINGUISHING MEDIA: USE FOAM AND/OR CO2 AND/OR DRY CHEMICAL

UNUSUAL FIRE AND EXPLOSION HAZARDS: KEEP CONTAINER TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT.

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND TO POTENTIAL IGNITION SOURCES AWAY FROM THE MATERIAL HANDLING POINT SUCH AS PILOT LIGHTS.

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SPECIAL FIREFIGHTING PROCEDURES: WATER MAY BE UNSUITABLE (SEE EXTINGUISHING MEDIA). WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE EXPLOSION WHEN EXPOSED TO EXTREME HEAT.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: ACUTE: INHALATION: IRRITATION OF THE RESPIRATORY TRACT IS POSSIBLE. OVEREXPOSURE MAY PRODUCE AN ANESTHETIC EFFECT.

SKIN OR EYE CONTACT: IRRITANT

LIQUID CAN BE A SEVERE IRRITANT TO THE EYES.

DIMETHYLETHANOLAMINE CAN BE ABSORBED IN TOXIC AMOUNTS, THROUGH PROLONGED OR REPEATED EXPOSURE

ETHYLENE GLYCOL MONOPROPYL ETHER CAN BE ABSORBED IN TOXIC AMOUNTS, THROUGH PROLONGED OR REPEATED EXPOSURE

ETHYLENE GLYCOL MONOBUTYL ETHER CAN BE ABSORBED IN TOXIC AMOUNTS, THROUGH PROLONGED OR REPEATED EXPOSURE

HEXAMETHOXYMETHYLMELAMINE MAY PRODUCE AN ALLERGIC RESPONSE,RESULTING IN DERMATITIS, IN CERTAIN (ALLERGIC) PERSONS.

CHRONIC: OVEREXPOSURE TO ISOBUTYL ALCOHOL HAS BEEN SUGGESTED AS A CAUSE OF ANEMIA AND LIVER ABNORMALITIES IN HUMANS

OVEREXPOSURE TO ETHYLENE GLYCOL MONOBUTYL ETHER HAS APPARENTLY BEEN FOUND TO CAUSE ANEMIA LIVER ABNORMALITIES, BLOOD ABNORMALITIES AND DAMAGE TO THE KIDNEYS AND LUNGS IN TESTING OF LABORATORY ANIMALS

SEE ADDITIONAL PRECAUTIONS, SECTION IX

PRIMARY ROUTES OF ENTRY: INHALATION AND/OR DERMAL

EMERGENCY FIRST AID PROCEDURES:

INHALATION: REMOVE TO FRESH AIR.

SPLASH (EYES): FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. TAKE TO A PHYSICIAN FOR MEDICAL TREATMENT,IF IRRITATION PERSISTS.

SPLASH (SKIN): WASH WITH SOAP AND WATER. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.

INGESTION: DO NOT INDUCE VOMITING. CONSULT A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

SECTION VI - REACTIVITY DATA

STABILITY: STABLE CONDITIONS TO AVOID: UNKNOWN

INCOMPATIBILITY (MATERIALS TO AVOID): OXIDIZING AGENTS, ACIDS.

HAZARDOUS DECOMPOSITION PRODUCTS: MAY PRODUCE FUMES IF HEATED TO DECOMPOSITION. FUMES MAY CONTAIN CARBON MONOXIDE,CARBON DIOXIDE, METHANOL,AMMONIA,FORMALDEHYDE, NITROGEN OXIDES, NITROGEN OXIDES, SULFUR OXIDES

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VII - SPILL OR LEAK PROCEDURES

216

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:	VENTILATE AREA. REMOVE OR EXTINGUISH POTENTIAL IGNITION SOURCES. REMOVE WITH INERT ABSORBENT OR RAGS. CAUTION: PAINT SATURATED RAGS CONSTITUTE A SPONTANEOUS COMBUSTION HAZARD. BEFORE BEGINNING CLEAN-UP, REFER TO HAZARD CAUTIONS IN OTHER SECTIONS OF THIS SHEET.
WASTE DISPOSAL METHOD:	DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII - SPECIAL PROTECTION INFORMATION

VENTILATION:	VENTILATE ADEQUATELY TO RELIEVE IRRITATING VAPORS OR ODORS.
EYE PROTECTION:	EYE COVERING,TO PROTECT AGAINST LIQUID SPLASH,IS SUGGESTED.
OTHER PROTECTIVE EQUIPMENT:	PROTECTIVE CAP AND COVERABLES ARE SUGGESTED.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:	KEEP CLOSURE TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKING.
	ALL CONTAINERS SHOULD BE GROUNDED WHEN HANDLING OR TRANSFERRING
	CONTAINS WATER - DO NOT FREEZE.
OTHER PRECAUTIONS:	DO NOT GET IN EYES. AVOID PROLONGED SKIN CONTACT.
	THE HEXAMETHOXYMETHYLMELAMINE RESIN EMPLOYED MAY CONTAIN 0.5% (MAX.-WEIGHT) FORMALDEHYDE. FORMALDEHYDE (CAS NO.50-00-0) HAS A TLV OF 3PPM(OSHA). FORMALDEHYDE HAS BEEN SHOWN TO CAUSE CANCER IN LABORATORY ANIMALS.

EXPLANATION AND DEFINITIONS

CINCINNATI VARNISH CO. ALSO MANUFACTURES COATINGS UNDER THE NAME OF JASPER CHEMICAL COATINGS (LACQUER DIVISION).

JASPER CHEMICAL COATINGS MAY BE CONTACTED:

JASPER CHEMICAL COATINGS
1014 VINE STREET
P.O. BOX 27
JASPER, INDIANA 47546
812-482-2863

SWITCHBOARD HOURS:
CINCINNATI - 7:30 A - 5:00 P (EASTERN TIME) *
JASPER - 8:00 A - 5:00 P (EASTERN TIME) *
* CINCINNATI OBSERVES DAYLIGHT SAVINGS TIME, DURING APPROPRIATE TIME OF YEAR. JASPER DOES NOT.
(THE NUMBER ON THE MSDS IS ANSWERED 24 HOURS A DAY FOR "EMERGENCIES.")

SECTION I PRODUCT IDENTIFICATION

PRODUCT NUMBERS AND NAMES WILL APPEAR EXACTLY AS THEY APPEAR ON CONTAINERS. TO AVOID ANY POSSIBLE CONFUSION, ABBREVIATIONS USED ON CONTAINER LABELS WILL BE USED HERE.

SECTION II HAZARDOUS INGREDIENTS

MATERIALS LISTED HERE ARE THOSE COMPONENTS OF THE FORMULATION WHICH POSE ANY PHYSICAL OR HEALTH HAZARD AS DEFIN BY THE CRITERIA ESTABLISHED BY OSHA IN THE HAZARD COMMUNICATION FINAL STANDARD (29CFR1910.1200). ALL SUCH MATERIALS CONTAINED IN AMOUNTS GREATER THAN 1% (VOLUME) ARE LISTED. MATERIALS KNOWN TO PRESENT PARTICULAR HAZARDS, LEAD AND KNOWN OR SUSPECTED CARCINOGENS - FOR EXAMPLE, ARE LISTED IF CONTAINED IN ANY QUANTITY. THE HAZARDOUS MATERIAL DESCRIPTION IS GENERALLY STRAIGHT FORWARD. HOWEVER, IT IS OCCASIONALLY NECESSARY, FOR TOTAL CLARITY, TO DEFINE THE TYPE RAW MATERIAL CARRYING THE HAZARDOUS MATERIAL. EXAMPLES OF THE TECHNIQUE EMPLOYED TO ACCOMPLISH THIS:

LEAD (METALLIC DRIER)
CHROMATE (CHROME GREEN PIGMENT)

IN THE FIRST INSTANCE LEAD IS THE HAZARDOUS MATERIAL, CONTAINED IN A METALLIC DRIER USED IN A FORMULA. IN THE SECOND CASE, THE HAZARD IS PRESENTED BY CHROMATE-CONTAINED IN A CHROME GREEN PIGMENT USED.

CHEMICAL ABSTRACT SERVICE NUMBERS (CAS NOS) ARE PRINTED, JUST BELOW THE CHEMICAL NAME, FOR ALL MATERIALS FOR WHICH WE HAVE THEM.

THE AMOUNT OF THE HAZARDOUS INGREDIENT CONTAINED IN THE FORMULA IS FOUND UNDER THE HEADING PERCENT. THE PER-CE LISTED IS % BY VOLUME ON TOTAL VOLUME; UNLESS DESIGNATED BY THE SYMBOL (W) NEXT TO THE LISTING. (W) INDICATES THAT THE AMOUNT IS % BY WEIGHT ON THE TOTAL WEIGHT AND IS USED ONLY IN CASES WHERE VOLUMETRIC CONTRIBUTION CALCULATIONS ARE NOT POSSIBLE. IN EITHER CASE THE AMOUNT SHOWN IS A ROUNDED-OFF FIGURE (FROM CALCULATED THEORETICAL USING THE FOLLOWING GUIDE:

5 - 100% - THE NEAREST 5%
0.5 - 5% (5%
0 - 0.5% (0.5%

(UNDERSTANDING THIS PROCEDURE IS, OBVIOUSLY, A VITAL STEP IN YOUR ASSESSMENT OF THE HAZARDS PRESENTED BY THE " WHOLE " COATING.)

OCCUPATIONAL EXPOSURE LIMITS ARE REPORTED NEXT; TO AS GREAT AN EXTENT AS POSSIBLE USING THOSE ESTABLISHED BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENE (ACGIH).

SECTION II "CONTINUED" HAZARDOUS INGREDIENTS

VAPOR PRESSURE IS REPORTED IN MM HG/DEG F AS:

216

6/106

MEANING 6 MM HG @ 106 DEG F.

(ONLY IN THESE TWO SECTIONS, OCCUPATIONAL EXPOSURE LIMITS AND VAPOR PRESSURE, ARE ABBREVIATIONS USED — FOR SPAC CONSIDERATIONS. N/A SYMBOLIZING "NOT APPLICABLE" AND N/E FOR "NOT ESTABLISHED".)

THE TOXICITY DATA SECTION WILL REPORT ANY ADDITIONAL TOXICITY DATA WE HAVE ON THE MATERIAL, SUCH AS LD 50, LC 50, POISON, ETC.

SECTION III PHYSICAL DATA

THE BOILING RANGE REPORTED IS THAT COVERED BY THE FORMULATIONS TOTAL VOLATILE COMPONENTS - REGARDLESS OF THE AMOU SPECIFIC TO EACH.

THE PER-CENT VOLATILE VOLUME IS A CALCULATED THEORETICAL FIGURE. A RANGE OF PLUS OR MINUS 1.0% MAY BE ASSUMED.

WEIGHT PER GALLON IS ALSO CALCULATED THEORETICAL. A RANGE OF PLUS OR MINUS 0.10 POUNDS IS NORMALLY ASSUMED BETWEE 7.0 AND 10.0 POUNDS, INCREASING AND DECREASING PROPORTIONALLY AND SLIGHTLY BEYOND THIS WEIGHT RANGE.

SECTION IV FIRE AND EXPLOSION DATA

THE FLAMMABILITY CLASSIFICATION, ESTABLISHED BY OSHA, IS GIVEN. THESE CLASSIFICATION CRITERIA ARE:

FP*(	73 DEG F AND BP*(	100 DEG F..FLAMMABLE	LIQUID CLASS IA
FP (	73 DEG F AND BP)	100 DEG F..FLAMMABLE	LIQUID CLASS IB
FP	73 DEG F BUT (	100 DEG F..FLAMMABLE	LIQUID CLASS IC
FP	100 DEG F BUT (	140 DEG F..COMBUSTIBLE	LIQUID CLASS II
FP	100 DEG F BUT (	200 DEG F..COMBUSTIBLE	LIQUID CLASS IIIA
FP	200 DEG F AND ABOVE	..COMBUSTIBLE	LIQUID CLASS IIIB

* FP - FLASH POINT * BP - BOILING POINT

THE REPORTED FLASH POINT OF THE MATERIAL IS EXPERIMENTALLY DETERMINED USING A SETAFLASH (CLOSED CUP) TESTER. SINCE THIS IS AN EXPERIMENTAL DETERMINATION, A BATCH-TO-BATCH RANGE OF PLUS OR MINUS 3 DEG F SHOULD BE ASSUMED.

THE LOWER EXPLOSIVE LIMIT (LEL) REPORTED IS THAT OF THE LOWEST OF ALL PERTINENT, CONTAINED MATERIALS: AGAIN DISREGARDING THE AMOUNT CONTAINED.

THE REMAINING SECTIONS OF THE FORM ARE TEXT AND REQUIRE NO EXPLANATION. WE WOULD, HOWEVER, LIKE TO CALL ATTENTION TO ONE ASPECT. TO A LARGE EXTENT WE HAVE TRIED TO SPECIFY, REGARDING PRECAUTIONARY STATEMENTS, THE MATERIAL WHICH MAKES THE STATEMENT PERTINENT. AGAIN, WE FEEL THIS WILL BE MOST USEFUL WHEN ASSESSING THE HAZARD POTENTIAL OF THE MIXTURE. IN OTHER WORDS IF A MIXTURE CONTAINS 5-10% OF A MATERIAL WHICH IS A POTENTIAL CHRONIC HEALTH HAZARD, THE CHRONIC HAZARD OF THE WHOLE WOULD NOT NORMALLY BE ASSESSED AS TOO SEVERE. IF WE WERE TO PRINT ONLY THE APPLICABLE PRECAUTION, WITHOUT SPECIFICALLY ATTRIBUTING ITS' SOURCE, READERS WOULD HAVE NO BASIS ON WHICH TO MAKE THIS TYPE ASSESSMENT AND WOULD HAVE TO ASSUME SEVERITY OF THE WHOLE. UTILIZING THIS APPROACH TO MAKING HAZARD ASSESSMENTS OF BLENDS IS AT THE DESCRETION OF THE ASSESSOR.

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ATTACHMENT 2

STORM SEWER DIVERSIONS 1986-1989

DATE	CAUSE	CORRECTIVE ACTION
1-23-86	oil in storm sewer	oil removed with a vacuum
2-2-87	kerosene in storm sewer	removed at General Sump
4-24-87	low pH at MH 22	added lime to raise pH
11-6-87	NH4OH in storm sewer	diluted with water
2-8-88	diesel fuel in storm sewer	removed at General Sump
2-18-88	low pH in storm sewer	treated at General Sump
3-30-88	kerosene in storm sewer	removed at General Sump
9-6-88	low pH at MH 22	treated at General Sump
12-29-88	Plant 8 sump pad overflowed	removed at General Sump
3-15-89	diesel fuel in storm sewer	removed at General Sump