

MATERIAL SAFETY DATA SHEET

PRODUCT CODE: hdepoxy

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HD Epoxy Coating PART A
PRODUCT CODES: hdepoxy A

MANUFACTURER: Legacy Industrial Products LLC
STREET ADDRESS: 570 Lake Cook Rd. Ste 300
CITY, STATE, ZIP: Deerfield, IL 60015

INFORMATION PHONE: 888-652-0333

EMERGENCY PHONE: INFOTRAC: 1-800-535-5053

Email: sales@legacyindustrial.co

PREPARED BY: R. Engle

DATE REVISED: 1/11/18

SECTION 2: HAZARDS IDENTIFICATION

HMIS HAZARD CLASSIFICATION

HEALTH: 2 **FLAMMABILITY:** 1 **REACTIVITY:** 0 **PERSONAL PROTECTIVE EQUIPMENT:** G

POTENTIAL HEALTH EFFECTS

EYES:

MAY CAUSE IRRITATION BUT NO CORNEAL INJURY IS LIKELY.

SKIN:

MAY CAUSE IRRITATION OR ALLERGIC SKIN RESPONSE.

INGESTION:

THIS MATERIAL HAS A PROBABLE LOW ACUTE ORAL TOXICITY.

INHALATION:

NO GUIDE FOR CONTROL KNOWN, HOWEVER, EXPOSURE TO HEATED VAPORS CAN CAUSE IRRITATION TO THE NOSE, THROAT OR MUCOUS MEMBRANES..

HEALTH HAZARDS (ACUTE AND CHRONIC):

EPOXY RESINS CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATION OF VAPOR. EYES: INJURY IF UNLIKELY BUT STAIN FOR EVIDENCE OF CORNEAL INJURY.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

CARCINOGENICITY

OSHA: NO NTP: yes IARC: yes

ADDITIONAL CARCINOGENICITY INFORMATION:

Some colors may contain carbon black - Explanation Of Carcinogenicity for carbon: IARC MONOGRAPHS ON EVALUATION OF CARCINOGENIC RISK OF CHEMICALS TO MAN, VOL 65, PG 149, 1996: GROUP 2B. Product may contain ethyl benzene as a component of xylene (IARC 2B). IARC has determined that crystalline silica inhaled in the form of quartz is carcinogenic to humans (Group 1- carcinogenic to humans). The NTP classifies respirable crystalline silica as reasonably anticipated to be a carcinogen. Titanium Dioxide is listed by IARC as possibly carcinogenic to humans (group 2B).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
MODIFIED DIGLYCIDYL ETHER OF BISPHENOL A	25068-38-6	NONE	NONE	NONE	
ALKYL GLYCIDYL ETHER	69609-97-2	NONE	NONE	NONE	
Talc	14807-96-6	20mg/m3	20mg/m3	20mg/m3	
*crystalline silica (as a component of talc)	14808-60-7	10mg/m3	.1mg/m3	.1mg/m3	(<1.0%)
LIMESTONE	1317-65-3	15mg/m3	5MG/M3	NONE	
*XYLENE	1330-20-7	100PPM	100PPM	150PPM	<1.0
*ethyl benzene (as a component of xylene)	100-41-4	100ppm	100ppm	125ppm	<0.1%
Siloxanes and silicones, di-me reactions products with silica (non-hazardous)	67762-90-7	none	none	none	
siloxanes and silicones, di-methyl (non-hazardous)	63148-62-9	none	none	none	
COLORS MAY CONTAIN:					
Titanium Dioxide	13463-67-7	10mg/m3	10mg/m3	5mg/m3	
*CARBON	1333-86-4	3.5PPM	3.4PPM	NONE	<1.0
Silicon Dioxide	7631-86-9	6mg/m3	10mg/m3	NONE	
Ferric Oxide	1309-37-8	10mg/m3	8mg/m3	NONE	
Iron III oxide	20344-49-4	15mg/m3	5mg/m3	NONE	
Yellow Pigment	Not available	NONE	NONE	NONE	
Zinc Sulfate (component of yellow pigment)	1314-98-3	NONE	NONE	NONE	

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Barium Sulfate (component of yellow pigment)	7727-43-7	NONE	NONE	NONE
Pigment yellow 65 (component of yellow pigment)	6528-34-3	NONE	NONE	NONE
C.I. Pigment Blue	147-14-8	1mg/m3	1mg/m3	NONE
Aluminum Oxide	1344-28-1	15mg/m3	10mg/m3	NONE
Iron Oxide Yellow	51274-00-1	15mg/m3	10mg/m3	NONE

SECTION 3 NOTES: *Indicates toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372.
XYLENE ACHIH STEL=150PPM

SECTION 4: FIRST AID MEASURES

EYES:

FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN.

SKIN:

SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH AFFECTED AREA WITH SOAP AND WATER AND REMOVE CONTAMINATED CLOTHING PROMPTLY.

INGESTION:

LOW IN TOXICITY, INDUCE VOMITING ONLY IF LARGE AMOUNTS OF MATERIAL ARE INGESTED, AND OTHERWISE DO NOT INDUCE VOMITING. IN EITHER CASE CONSULT WITH A PHYSICIAN.

INHALATION:

REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR,
(% by volume)

UPPER: not available
LOWER: not available

FLASH POINT: 200+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:

DO NOT ENTER CONFINED AREA WITHOUT FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL ALL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NONE KNOWN.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

WEAR RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF THE SOURCE AT THE LEAK. REMOVE EXCESS WITH VACUUM TRUCK AND TAKE UP THE REMAINDER WITH AN ABSORBENT SUCH AS CLAY AND PLACE IN DISPOSAL CONTAINERS. FLUSH AREA WITH WATER TO REMOVE RESIDUE.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

STORE IN A COOL DRY PLACE. SEAL ALL PARTIALLY USED CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS'S OF ALL THE COMPONENTS PRIOR TO USING MATERIAL. PROPERLY LABEL ALL CONTAINERS

OTHER PRECAUTIONS:

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS GENERATED FROM THE MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYGIENE AND SAFE WORKING PRACTICES. CONTAMINATED LEATHER ARTICLES CAN NOT BE CLEANED AND MUST BE DISCARDED IF CONTAMINATED WITH THIS PRODUCT. WASH ALL CONTAMINATED CLOTHING PRIOR TO THE REUSE THEREOF

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

USE A NIOSH APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVER EXPOSURE TO VAPOR IN ACCORDANCE WITH 29 CFR 1910.134. GENERAL EXHAUST IS USUALLY SUFFICIENT IN LIEU OF NIOSH RESPIRATOR

VENTILATION :

GENERAL EXHAUST IS USUALLY SUFFICIENT TO CONTROL VAPORS AND EXPOSURE HAZARDS

PROTECTIVE GLOVES:

IMPERVIOUS GLOVES – NEOPRENE OR RUBBER

EYE PROTECTION:

SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

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WEAR BODY COVERING CLOTHING AND OTHER COVERINGS AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.

WORK HYGIENIC PRACTICES:

OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: LOW VISCOSITY LIQUID IN VARYING COLORS

BOILING POINT OR RANGE: 200 TO 279F

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H₂O = 1): 1.5

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: NEGLIGIBLE

SECTION 10: STABILITY AND REACTIVITY

STABILITY:

STABLE

CONDITIONS TO AVOID (STABILITY):

AVOID EXCESSIVE HEAT OR OPEN FLAMES.

INCOMPATIBILITY (MATERIAL TO AVOID):

CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS ACIDS OR MINERAL ACIDS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

CO₂, ALDEHYDES, ACIDS. REACTION WITH SOME CURING AGENTS CAN GENERATE LARGE AMOUNTS OF HEAT.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

Component CAS# 25068-38-6: Moderate sensitizer, slight eye irritant, moderate skin irritant, Oral LD50 >5000 mg/kg (rat), Dermal LD50 >6000 mg/kg (rabbit)

Component CAS# 68609-97-2: possible sensitizer, eye and skin irritant, Oral LD50 >10000 mg/kg (rat), Inhalation LD50 – no microscopic changes

Component Titanium Dioxide: Inhalation 4 h LC50 > 6.82 mg/l; Oral LD50 > 5000 mg/kg, rat; In February 2006, IARC listed titanium dioxide as possibly carcinogenic to humans Group 2B.

Component CAS# 14807-96-6: Carcinogenic effects – this component may contain crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline Silica is also listed by the NTP as a known human carcinogen

Component Limestone: LD50 Oral (rat) = 6450 mg/kg. This product contains greater than 0.1% crystalline silica which is listed as a group I carcinogen by IARC, a known carcinogen by NTP, OSHA and as A2 suspected human carcinogen by ACGIH

Component Xylene: Inhalation LC50 26800ppm, Skin LD50 2000 mg/kg, Ingestion LD50 4.3 g/kg. Exposure may effect skin, eye, liver, kidney, nervous system, respiratory system and lungs. High concentrations may lead to nervous system effects. Repeated overexposure has produced toxic effects in developing and young laboratory animals. Aspiration into lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. Xylene may contain ethyl benzene, and toluene. Ethyl benzene has shown limited evidence of a carcinogenic effect.

Component Iron III oxide CAS# 20344-49-4: Acute Oral Toxicity LD50 >5000 mg/kg (rat).

Component Carbon: IARC lists carbon as a possible human carcinogen Category 2B. LD50 – Intravenous, mouse = 440 mg/kg

Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.. Acute oral value of 20 gm/kg or greater in rats

SECTION 12: ECOLOGICAL INFORMATION

CAS# 25068-38-6: Biodegradability (Modified Sturm Method) 12%, Fish toxicity: Rainbow trout (96hr) LC50 1.5mg/l, Zebra Fish (96hr) LC50 2.4 mg/l. Invertebrate Toxicity: Daphnia Toxicity (24hr) EC 50 3.6 mg/l

Component Titanium Dioxide: Pimephales promelas (fathead minnow) < 1000 mg/l @ 96h LC50; Pseudokirchneriella subcapitata (green algae) 61 mg/l @ 72h EC50; Daphnia magna (water flea) > 1000 mg/l @ 48h EC50

Component CAS# 14807-96-6: There is no data that suggests that crystalline silica is toxic to birds, fish, invertebrates, microorganisms or plants.

Component Limestone: inert material

Component Xylene: Acute Toxicity: Fish: Toxic 1 < LCECIC50 < 10mg/l, Aquatic Invertebrates: Toxic 1 < LC/EC/IC50 <10mg/l, Algae: Toxic 1 < LC/EC/IC50 <10 mg/l. Mobility – floats on water. If it enters the soil it will be highly mobile and may contaminate groundwater. Oxidises rapidly by photo-chemical reactions in air.

Component Iron III oxide CAS# 20344-49-4: Acute and Prolonged Toxicity to fish LC0 >1000 mg/l (golden Orfe). Toxicity to Microorganisms EC0 > 10000mg/l (pseudomonas putida)

Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:

DISPOSE OF THE MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAW.

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SECTION 14: Transport Information

DOT: Not Regulated

IMO/IMDG: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CONTAINS Bisphenol A Diglycidyl Ether Polymer), 9, PGIII,
Hazard Label: Marine Pollutant

SECTION 15: REGULATORY INFORMATION

OSHA HAZARD CLASS: irritant, sensitizer

CAS# 25068-38-6: Considered a hazardous chemical; is on the TSCA list; is on the DSL Canada, WHMIS class D2B; Is on the New Jersey Right to Know list; is on the PA Right to Know List;

Component CAS# 68609-97-2: Considered a hazardous chemical; is on the TSCA list; is on the DSL Canada, Is on the New Jersey Right to Know list; is on the PA Right to Know List.

Component CAS# 14807-96-6 may contain Crystalline Silica (Silicon Dioxide) which is on the TSCA list. NTP list as a known human carcinogen, California proposition 65 list as a known carcinogen, Massachusetts Toxic Use Reduction Act list as toxic, Pennsylvania Worker and community right to know Act list as a hazardous substance.

Component Titanium Dioxide: Contains Proposition 65 Chemicals, is on the PA Hazardous substance list, is on the NJ right to know Regulated chemical List.

Titanium Dioxide is on inventory or in compliance with EINECS, TSCA, AICS, DSL, ENCS (JP), KECI (KR), PICCS (PH) and INV (CN).

Component Limestone: TSCA listed. Canada Exempt, naturally occurring Substance. EINECS, ECL, ENCS, CIES, PICCS listed. This product contains known to the state of California to cause cancer or reproductive effects.

Component Xylene: Xylene contains EPCRA section 313 chemicals subject to the reporting requirements of the emergency planning and community right to know act of 1968. (Maximum wt % for components of xylene are: M-Xylene CAS# 108-38-3 is 46%, P-Xylene CAS# 106-42-3 is 20%, Ethyl Benzene CAS# 100-41-4 is 19%, O-Xylene CAS# 95-47-6 is 16%.. Xylene and its components are on the California Proposition 65 list for developmental toxicity, Reproductive toxicity and carcinogen list. Ingredients are on the TSCA list, DSL Canada, AICS, China, EINECS, ENCS, Korea, New Zealand, Philippines inventory lists and on the Massachusetts, New Jersey, Pennsylvania right to know lists Ethyl Benzene a component of xylene has been designated by IARC as a possible carcinogen to humans based on increased tumor incidence in laboratory animals. risk phrases R10 Flammable R20/21 Harmful by inhalation and in contact with skin, R38 irritating to skin, S25 Avoid contact with eyes.

Siloxanes and silicones, di-me reactions products with silica: Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.

siloxanes and silicones, di-methyl: Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.

Component Carbon: Contains Proposition 65 Chemicals .Carbon: is listed on TSCA and DSL Canada

Component CAS# 7631-86-9: Component is on the Minnesota right to know list. Component is on TSCA list and Canada DSL.

Component CAS# 1309-37-8: Component is on the TSCA list and Canada DSL.

Component Iron III oxide CAS# 20344-49-4: Listed on TSCA Inventory. Potential exposure to all of the California proposition 65 chemicals have been determined to be below the No significant risk level (NSRL). Components are on the Pennsylvania right to know substance list. Component contains the following chemicals listed on the Pennsylvania RTK special hazardous Substance lists: chromium CAS# 7440-47-3 (0.02%) and nickel CAS# 7440-02-0 (0.015%). Component contains the following ingredients which are on the Massachusetts hazardous substance lists: Chromium CAS# 7440-47-3 (0.02%), arsenic CAS# 7440-38-2 (60ppm), Beryllium CAS# 7440-41-7 (1ppm) and Nickel CAS# 7440-02-0 (0.015%) Component contains the following chemicals on the California Proposition 65 list known to the state of California to be carcinogenic: Nickel CAS# 7440-02-0 (0.015%), arsenic CAS# 7440-38-2 (60ppm), Beryllium CAS# 7440-41-7 (1ppm) and Cobalt CAS# 7440-48-4 (70ppm)..

Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.

Component CAS# 147-14-8: Component is on the TSCA List. and not controlled under WHMIS. Component is a CERCLA hazardous substance

Component CAS# 1344-28-1: Component is on the Massachusetts, New Jersey, Pennsylvania right to know lists. Component is on TSCA list and Canada DSL.

Component CAS# 51274-00-1: Component is on the TSCA list and Canada DSL.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HD Epoxy PART B
PRODUCT CODES: hdepoxy B

MANUFACTURER: Legacy Industrial Products LLC
STREET ADDRESS: 570 Lake Cook Rd. Ste 300
CITY, STATE, ZIP: Deerfield, IL 60015

INFORMATION PHONE: 888-652-0333

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Email: sales@legacyindustrial.co

PREPARED BY: R. Engle

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SECTION 2: HAZARDS IDENTIFICATION

HMIS HAZARD CLASSIFICATION

HEALTH: 3 **FLAMMABILITY:** 2 **REACTIVITY:** 0 **PERSONAL PROTECTIVE EQUIPMENT:** G

POTENTIAL HEALTH EFFECTS

EYES:

CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING OR BLURRED VISION.

SKIN:

MAY CAUSE IRRITATION, DEFATTING AND DERMATITIS.

INGESTION:

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA AND ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

INHALATION:

CAN CAUSE NAUSEA AND RESPIRATORY IRRITATION DIZZINESS, WEAKNESS, FATIGUE, HEADACHE, AND POSSIBLE UNCONSCIOUSNESS.

HEALTH HAZARDS (ACUTE AND CHRONIC):

AMINE RESINS CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATIONS OF VAPOR. OVER-EXPOSURE TO THIS MATERIAL CAN CAUSE CARDIAC ABNORMALITIES, ANEMIA, LIVER ABNORMALITIES, KIDNEY DAMAGE OR EVEN EYE DAMAGE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC RESPONSE.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

NO LISTED INGREDIENTS OF THIS PRODUCT ARE REGULATED AS CARCINOGENS.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OSHA STEL</u>	<u>WEIGHT %</u>
BENZYL ALCOHOL	100-51-6	NONE	NONE	NONE	
3-AMINOMETHYL-3,5,5-TRIMETHYL CYCLOHEXANE	2855-13-2	NONE	NONE	NONE	
2-HYDROXYBENZOIC ACID	69-72-7	NONE	NONE	NONE	
TRIS-2,4,6-DIMETHYLAMINOMETHYLPHENOL	90-72-2	NONE	NONE	NONE	
Bis(dimethylaminomethyl) phenol	71074-89-0	NONE	NONE	NONE	
PROPYLENE GLYCOL MONOMETHYL ETHER	107-98-2	100PPM	100PPM	150PPM	
Propylene Glycol Monomethyl Ether Acetate	108-65-6	NONE	NONE	NONE	<0.5%
*sec-butyl alcohol	78-92-2	150ppm	100ppm	NONE	<0.5%
Butyl Acetate	123-86-4	150ppm	150ppm	200ppm	<0.5%

*Indicates toxic chemicals subject to the reporting requirements of section 313 Title III of 40 CFR 372.

SECTION 4: FIRST AID MEASURES

EYES:

FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN.

SKIN:

SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH AFFECTED AREA WITH SOAP AND WATER AND REMOVE CONTAMINATED CLOTHING PROMPTLY.

INGESTION:

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DO NOT INDUCE VOMITING, KEEP PERSON WARM AND CONSULT A PHYSICIAN IMMEDIATELY.

INHALATION:

REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR,
(% by volume)

UPPER: not available

LOWER: not available

FLASH POINT: 91°F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO₂, DRY CHEMICAL

SPECIAL FIRE FIGHTING PROCEDURES:

DO NOT ENTER CONFINED AREA WITHOUT FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL ALL FIRE EXPOSED CONTAINERS WITH WATER. PRESENCE OF SOLVENTS IN PRODUCT MAY REQUIRE GROUNDING.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

IF FIRE OCCURS, SOLVENTS MAY PRODUCE EXCESSIVE PRESSURE. SEALED DRUMS MAY RUPTURE AND IGNITE. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND AND IGNITE BY ANY SOURCE OF IGNITION. NEVER USE A CUTTING OR WELDING TORCH NEAR CONTAINERS (EVEN EMPTY). ALL 5 GALLON AND LARGER CONTAINERS SHOULD BE GROUNDED BEFORE TRANSFERRING MATERIAL.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

WEAR RESPIRATOR AND PROTECTIVE CLOTHING. REMOVE ALL SOURCES OF IGNITIONS. REMOVE EXCESS WITH VACUUM TRUCK TAKE UP REMAINDER WITH CLAY OR OTHER ABSORBENT AND PLACE IN DISPOSAL CONTAINERS. FLUSH AREA WITH WATER TO REMOVE RESIDUE.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

STORE IN COOL DRY PLACE. SEAL ALL PARTIALLY USED CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ ALL MSDS'S OF ALL THE COMPONENTS PRIOR TO USING MATERIAL. PROPERLY LABEL ALL CONTAINERS. KEEP AWAY FROM ALL SOURCES OF IGNITION.

OTHER PRECAUTIONS:

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS GENERATED FROM THE MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYGIENE AND SAFE WORKING PRACTICES. CONTAMINATED LEATHER ARTICLES CANNOT BE CLEANED AND MUST BE DISCARDED IF CONTAMINATED WITH THIS PRODUCT. WASH ALL CONTAMINATED CLOTHING PRIOR TO THE REUSE THEREOF. WEAR APPROPRIATE SAFETY EQUIPMENT AND RESPIRATOR AT ALL TIMES WHEN VENTILATION IS NOT SUFFICIENT TO CONTROL VAPORS.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

USE A NIOSH APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVER-EXPOSURE TO VAPOR IN ACCORDANCE WITH 29 CFR 1910.134. ENGINEERING OR ADMINISTRATIVE MEASURES SHOULD BE TAKEN TO REDUCE THE RISK AND EXPOSURE.

VENTILATION:

PROVIDE SUFFICIENT MECHANICAL (GENERAL AND LOCAL EXHAUST). VENTILATION TO MAINTAIN EXPOSURE BELOW TOXIC LEVEL VALUES.

PROTECTIVE GLOVES:

IMPERVIOUS GLOVES – NEOPRENE OR RUBBER

EYE PROTECTION:

SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

WEAR BODY COVERING CLOTHING AND OTHER COVERINGS AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.

WORK HYGIENIC PRACTICES:

OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: LOW VISCOSITY LIQUID – SOLVENT ODOR

BOILING POINT OR RANGE: 243 TO 401°F

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H₂O = 1): 1.0

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: NEGLIGIBLE

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SECTION 10: STABILITY AND REACTIVITY

STABILITY:

STABLE

CONDITIONS TO AVOID (STABILITY):

AVOID EXCESS HEAT OR OPEN FLAMES AS WELL AS ALL SOURCES OF IGNITIONS SUCH AS SPARKS, HEATERS, AND STATIC DISCHARGES ETC.

INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID EPOXY RESINS IN UNCONTROLLED AMOUNTS AND STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

MAY FORM TOXIC CHEMICALS, CARBON DIOXIDE, CARBON MONOXIDE AND VARIOUS HYDROCARBONS ETC.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

SENSITIZATION: May cause sensitization by skin contact.

Component Benzyl Alcohol: Inhalation LC50 (4hr) >4178 mg/l (rat), Dermal LD50 2000 mg/kg (rabbit) Rats exposed to 800 mg/kg for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No observed Adverse effect level (NOAEL) was 400 mg/kg. No evidence of carcinogenicity was seen in two year study with rats and mice.

Component CAS# 2855-13-2: Oral LD50 rat 1030 mg/kg. Skin irritation – Corrosive subcategory 1C where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days. Eye irritation – Risk of serious damage to eyes. Product Sensitization (Magnusson- Kingman test) guinea pig: may cause sensitization by skin contact. Product Teratogenicity oral rat NOEL (no observed effect level) 250 mg/kg

Component CAS# 69-72-7: Acute Oral Toxicity LD50 (rat) = 891 mg/kg (behavioral somnolence (general depressed activity, Behavioral muscle weakness)). Acute Inhalation LC50 (rat) >900 mg/m³, 1 hr. Acute Dermal LD50 (rabbit) >10,000 mg/kg. Skin Irritation (rabbit) – mild skin irritation -24hr. Eye Irritation (rabbit) – severe eye irritation.

Component CAS# 107-98-2: Ingestion LD50 rat 4016 mg/kg, Dermal LD50 rabbit >2000 mg/kg, Inhalation LC50 6 hr Vapor, rat >25.8 mg/l. May cause eye or skin irritation. May effect Kidney or liver. Has been reported to be toxic to fetus in laboratory animals.

Component CAS# 108-65-6: Acute Oral Toxicity LD50 > 5000 mg/kg (rat); Acute Inhalation Toxicity LD50 4345 ppm, vapor, 6 hrs (rat); Acute dermal Toxicity LD50 > 5000 mg/kg (rat); Skin Irritation rabbit – non-irritating; Eye irritation rabbit – slightly irritating; Sensitization dermal: non-sensitizer (guinea pig, maximization test); repeated dose toxicity 14 days, inhalation NOAEL: 1000 ppm, rat; Mutagenicity Genetic Toxicity in Vitro: Ames test – negative (salmonella typhimurium, metabolic activation: with/without); Developmental Toxicity/Teratogenicity: rat female inhalation, 6 hrs/day 7 days/week, NOAEL (teratogenicity) > 4000 ppm. No Teratogenicity effects observed at doses tested.

Component CAS# 78-92-2: Acute Oral Toxicity LD50 = 6480 mg/kg (rat)

Component Butyl Acetate: Acute Oral Toxicity LD50 = 10768 mg/kg (rat) 4hr estimated. Acute Dermal Toxicity LD50 = 17601 mg/kg (rabbit) 4hr estimated. Acute Toxicity of the vapor LC50 = 2000 (rat) 4hr estimated.

Component CAS# 90-72-2 and CAS# 71074-89-0: Oral LD50 (rat) 1200 mg/kg; Dermal LD50 (rabbit) 1280 mg/kg; Inhalation LC50 (rat) > 0.5 mg/liter/1 hour; Severe irritant to eyes of a rabbit. Severe irritant to the skin of a rabbit. Corrosive to the skin of a rabbit.

SECTION 12: ECOLOGICAL INFORMATION

Component Benzyl Alcohol: EC50 (48hr) 400 mg/l Daphnia Magna, EC50 (72hr) 2600 mg/l Algae, Biodegradation BOD₂ 62. Slightly or not bioaccumulative. Toxicity to fish: LC50 (96 hr) 10 mg/l Bluegill sunfish (Lepomis macrochirus), LC50 (96hr) 460 mg/l Fathead minnow (Pimephales promelas), Toxicity to Algae: IC50 (72hr) 700 mg/l

Component CAS# 2855-13-2: Biodegradability 42% and is not readily biodegradable. Bioaccumulation: - no significant accumulation of the substance in organisms is to be expected. Mobility: The soil mobility of the substance is only minimally affected by adsorption to soil components. Toxicity to fish: LC50 Lauciscus idus 110 mg/l (96hr). Toxicity to Daphnia NOEC 3 mg/l (504hr). EC50 Daphnia magna 23 mg/l (48 hr). ErC50 scenedesmus subspicatus 50 mg/l (72 hr). NOEC scenedesmus subspicatus 1.5 mg/l (72 hr). Toxicity to bacteria: EC10 Pseudomonas putida 1120 mg/l (18 hr).

Component CAS# 69-72-7: Toxicity to Fish LC50 (Leuciscus idus – 96 mg/l. Toxicity to Daphnia magna – 105mg/l, 24 hr.

Component Mutagenic Effects: Mutagenic for bacteria and/or yeast. Developmental toxicity: Classified reproductive system/toxin/female, development toxin possible.

Component CAS# 107-98-2: Bioconcentration potential is low (BCF less than 100). Potential for mobility in soil is high (KOC between 0 and 50). Material is readily biodegradable and is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100mg/l in the most sensitive species tested.. LC50 fathead minnow 96 hr 20800 mg/l, LC50 water flea 48 hr lethally 23300 mg/l, EbC50 green algae biomass growth inhibition 7 d >1000 mg/l. Toxicity to microorganisms IC50 activated sludge > 1000 mg/l

Component CAS# 108-65-6: Biodegradation Aerobic: 100% exposure time 8 days. Acute and prolonged Toxicity to Fish LC50: 161 mg/l (fathead minnow, 96 hrs; Acute toxicity to Aquatic Invertebrates EC50: 408 mg/l (water flea, 48 hrs))

Component CAS# 78-92-2: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The products of degradation are more toxic.

Component Butyl Acetate: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The products of degradation are more toxic.

Component CAS# 90-72-2 and CAS# 71074-89-0: Toxicity: LC50 fish 447.8 mg/l (96 hr). LC50 Crust 28.2 mg/l (48 hr). EC50 alga 34.8 mg/l (96 hr)

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:

DISPOSE OF MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS.

SECTION 14: Transport Information

DOT: UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS PROPYLENE GLYCOL MONOMETHYL ETHER), 3, PG III,
IMO/MDG : UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS PROPYLENE GLYCOL MONOMETHYL ETHER), 3, PG III,

SECTION 15: REGULATORY INFORMATION

OSHA HAZARD CLASS: Flammable/ immediate health hazard

Component Benzyl Alcohol: E20/22 Harmful by inhalation and if swallowed. On TSCA list, on DSL Canada

Component CAS# 2855-13-2: Acute health hazard. Ingredients on TSCA. International Chemical status listed/registered – EINECS/ELINCS, DSL, AICS, MITI, TCOL, PICCS, China, New Zealand.

Component CAS# 69-72-7: Component is on the Pennsylvania and New Jersey right to know lists. Component is on the TSCA and Canada DSL lists.

Component CAS# 107-98-2; on the PA right to know list. Product is on the TSCA list and DSL Canada

Component CAS# 108-65-6: on the TSCA list. Component is on the Pennsylvania, Massachusetts or New jersey Right to know substance list.

Component CAS# 78-92-2: Component is on Canada DSL and TSCA lists. Component is on the Massachusetts and Pennsylvania Right to Know list

Component Butyl Acetate: Component is on Canada DSL and TSCA lists. Component is on the Massachusetts and Pennsylvania Right to Know list. n-butyl acetate is a CERCLA hazardous substance

Component CAS# 90-72-2 and 71074-89-0 EEC symbol – Harmful, harmful if swallowed (R22) Irritating to eyes and skin (R36/38). Component is on the Canada DSL, TSCA, EINECS, AICS, ENCS, ECL, SEPA, PICCS lists

SECTION 16: DISCLAIMER

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.