

SAFETY DATA SHEET

80-11989-8314
Nov 09, 2017

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: 80-11989-8314
Product Name: 8314-A-CrownShield SB Primer, A-Side
Revision Date: Nov 09, 2017 **Date Printed:** Nov 09, 2017
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Crown Polymers Corp.
Address: 8550 W. Desert Inn Rd. Suite 102-125, Las Vegas, NV, US, 89117
Emergency Phone: Chemtrec:800-424-9300 (account: CCN1217) OR International:703-527-3887 (account:CCN1217)
Information Phone Number: (847) 659-0300
Fax: (847) 659-0310
Product/Recommended Uses: For Further Information, Refer to the Product Technical Data Sheet.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Acute aquatic toxicity - Category 3
Acute toxicity Dermal - Category 5
Acute toxicity Oral - Category 5
Carcinogenicity - Category 2
Chronic aquatic toxicity - Category 3
Eye Irritation - Category 2A
Flammable Liquids - Category 3
Reproductive Toxicity - Category 2
Skin Irritation - Category 2
Skin Sensitizer - Category 1
Specific Target Organ Toxicity - Repeated Exposure - Category 2

Pictograms



Signal Word

Warning

Hazardous Statements - Health

H313 - May be harmful in contact with skin
H303 - May be harmful if swallowed
H351 - Suspected of causing cancer.
H319 - Causes serious eye irritation
H361 - Suspected of damaging fertility or the unborn child.
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction

H373 - May cause damage to organs through prolonged or repeated exposure.

Hazardous Statements - Physical

H226 - Flammable liquid and vapor

Hazardous Statements - Environmental

H402 - Harmful to aquatic life

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P273 - Avoid release to the environment.

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P264 - Wash thoroughly after handling.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof [electrical/ventilating/lighting/...] equipment.

P242 - Use only non-sparking tools.

P243 - Take action to prevent static discharges.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

Precautionary Statements - Response

P312 - Call a POISON CENTER/doctor if you feel unwell.

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P370 + P378 - In case of fire: Use dry chemical, carbon dioxide, foam to extinguish.
For detailed information, see Section-5 (Fire Fighting Measures)

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P321 - Specific treatment (see section 4 on this SDS).

P332 + P313 - If skin irritation occurs: Get medical advice/attention.

P362 + P364 - Take off contaminated clothing. And wash it before reuse.

P333 + P313 - If skin irritation or a rash occurs: Get medical advice/attention.

P314 - Get Medical advice/attention if you feel unwell.

Precautionary Statements - Storage

P405 - Store locked up.

P403 + P235 - Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0025068-38-6	BISPHENOL A EPOXY RESIN	52% - 96%
0001330-20-7	XYLENE	12% - 22%
0000100-41-4	ETHYLBENZENE	3% - 6%
0000071-43-2	BENZENE	Trace

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

Skin Contact

Rinse/wash with lukewarm, gently flowing water and mild soap for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

Eye Contact

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Give 1 or 2 glasses of milk or water to drink and refer person to medical personnel. Do not give anything by mouth to an unconscious person.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Specific Hazards in Case of Fire

Excessive pressure or temperature may cause explosive rupture of containers.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Care should always be exercised in dust/mist areas.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify

authorities if any exposure to the general public or the environment occurs or is likely to occur.
If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment

Appropriate dust or face mask to eliminate breathing foam dust particulates.

Personal Precautions

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

Soak up material with absorbent and shovel into a chemical waste container. Cover container, but do not seal, and remove from work area. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, call CHEMTREC (Chemical Transportation Emergency Center) at 800-424-9300.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use.
Do not get in eyes, on skin or on clothing.
Do not breathe vapors or mists.
Use good personal hygiene practices.
Eating, drinking and smoking in work areas is prohibited.
Remove contaminated clothing and protective equipment before entering eating areas.
Eyewash stations and showers should be available in areas where this material is used and stored.
Individuals with existing respiratory disease such as chronic bronchitis, emphysema, or asthma should not be exposed.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.
Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool dry area. Store liquid in containers above ground and surround by dikes to contain spills or leaks.
Do not cut, drill, grind, weld, or perform similar operations on or near containers.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Use either an atmosphere supplying respirator or an air-purifying respirator for organic vapors.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
BENZENE	1 (a) / 25ceiling		50(a)/ 10minutes.		1	1		0.1c		1c		1
ETHYLBENZENE	100	435			1			100	435	125	545	
XYLENE	100	435			1			100	435	150	655	

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations
BENZENE	0.5	1.6	2.5	8	A1	Leukemia	Skin; A1; BEI
ETHYLBENZENE	20				A3	URT irr;Kidney dam (nephropathy); Cochlear impair	A3; BEI
XYLENE	100	434	150	651	A4	URT & eye irr; CNS imapir	A4; BEI

(C) - Ceiling limit, A1 - Confirmed Human Carcinogen, A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, CNS - Central nervous system, impair - Impairment, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	9.04 lb/gal
Specific Gravity	1.08
VOC Regulatory	0.00 lb/gal
<hr/>	
VOC Part A & B Combined	3.31 lb/gal
Appearance	Liquid
Odor Threshold	N.A.
Odor Description	Solvent
pH	N.A.
Water Solubility	N.A.
Flammability	N/A
Flash Point Symbol	N.A.
Flash Point	27 °C
Viscosity	N.A.
Lower Explosion Level	N.A.
Upper Explosion Level	N.A.
Vapor Pressure	N.A.
Vapor Density	Heavier than air
Freezing Point	N.A.
Melting Point	N.A.

Low Boiling Point	138 °C
High Boiling Point	N.A.
Auto Ignition Temp	N.A.
Decomposition Pt	N.A.
Evaporation Rate	Slower than ether
Coefficient Water/Oil	N.A.

SECTION 10) STABILITY AND REACTIVITY

Stability

Material is stable at standard temperature and pressure.

Conditions to Avoid

Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause buildup of pressure.

Hazardous Reactions/Polymerization

Will not occur but aliphatic amine will cause irreversible polymerization with considerable heat build up.

Incompatible Materials

This product will react with materials such as amines, alkalis and acids. Avoid strong oxidizing agents. Some reactions can be violent.

Hazardous Decomposition Products

Combustion products: organic vapors and thermal decomposition fragments.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation

Repeated skin contact may cause a persistent irritation or dermatitis. May also aggravate an existing skin condition.

Causes skin irritation

Aspiration Hazard

No data available

Respiratory/Skin Sensitization

Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12-24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness.

May cause an allergic skin reaction

Carcinogenicity

Suspected of causing cancer.

Germ Cell Mutagenicity

No data available

Reproductive Toxicity

Suspected of damaging fertility or the unborn child.

Serious Eye Damage/Irritation

Causes serious eye irritation

Specific Target Organ Toxicity - Repeated Exposure

Repeated exposure generally aggravates the following medical conditions : Cardiovascular disease and Chronic respiratory disease.

May cause damage to organs through prolonged or repeated exposure.

Acute Toxicity

Ingestion : Irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion.

May be harmful in contact with skin

May be harmful if swallowed

Specific Target Organ Toxicity - Single Exposure

No data available

0001330-20-7 XYLENE

LC50 (rat): 6350 ppm (4-hour exposure) (unspecified isomers and ethylbenzene) (1) LC50 (rat): 6700 ppm (4-hour exposure) (65% m-xylene, 7.6% o-xylene, 7.8% p-xylene, 19.3% ethylbenzene) (2) ethylbenzene) (1)
LC50 (rat): 6700 ppm (4-hour exposure) (65% m-xylene, 7.6% o-xylene, 7.8% p-xylene, 19.3% ethylbenzene) (2)
LD50 (oral, rat): 5400 mg/kg (52% m-, 19% o-, 24% p-) (1) LD50 (oral, female mouse): 5251 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)
LD50 (oral, male mouse): 5627 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)
LD50 (dermal, rabbit): 12180 mg/kg (m-xylene); greater than 1700 mg/kg (mixed xylenes - undefined composition) (3)
LD50 (oral, female mouse): 5251 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)
LD50 (oral, male mouse): 5627 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)
LD50 (dermal, rabbit): 12180 mg/kg (m-xylene); greater than 1700 mg/kg (mixed xylenes - undefined composition) (3)

0000071-43-2 BENZENE

LC50 (rat): 13,700 ppm (4 hour exposure) (26); 9,980 ppm (7 hour exposure) (13,200 ppm - equivalent 4 hour exposure) (18)
LD50 (oral, rat): 930 mg/kg (19); 5,600 mg/kg (2); 11.4 ml/kg (10,032 mg/kg) (21)
LD50 (oral, mouse): 4,700 mg/kg (11; unconfirmed)
LD50 (skin, rabbit and guinea pig): Greater than 9,400 mg/kg (20)

0000100-41-4 ETHYLBENZENE

LC50 (inhalation, rat): 4000 ppm; 4-hour exposure (3)
LD50 (oral, rat): 3.5 g/kg (1,3,5,10)
LD50 (oral, rat): 4.72 g/kg (3,5,7,8)
LD50 (dermal, rabbit): 17.8 g/kg (11)

Chronic Exposure

0000100-41-4 ETHYLBENZENE

CARCINOGENIC EFFECTS: Ethyl Benzene has been listed by IARC as Group 2B, Possibly Carcinogenic to Humans.

TERATOGENIC EFFECTS: Ethyl Benzene has been Classified as POSSIBLE for humans.

0001330-20-7 XYLENE

High exposure to Xylenes in some animal studies have been reported to cause health effects on the developing embryo/fetus.
Xylene in high concentrations has caused embryotoxic effects in laboratory animals.

Potential Health Effects - Miscellaneous

0000100-41-4 ETHYLBENZENE

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.
WARNING: This chemical is known to the State of California to cause cancer.

0001330-20-7 XYLENE

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

0025068-38-6 BISPHEENOL A EPOXY RESIN

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guin

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Under RCRA, it is the responsibility of the user of the product, to determine a the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information

UN/NA #: 1263
UN Proper Shipping Name: PAINT
Hazard Class: 3
Packing Group: III
Placard: Flammable

IMDG Information

UN/NA #: 1263
UN Proper Shipping Name: PAINT
Hazard Class: 3
Packing Group: III
Placard: Flammable
Marine Pollutant: No data available

IATA Information

UN/NA #: 1263
UN Proper Shipping Name: PAINT
Hazard Class: 3
Packing Group: III
Placard: Flammable

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0025068-38-6	BISPHENOL A EPOXY RESIN	52% - 96%	DSL,SARA312,TSCA
0001330-20-7	XYLENE	12% - 22%	SARA313, DSL,CERCLA,HAPS,SARA312,VHAPS,VOC,TSCA,RCRA
0000100-41-4	ETHYLBENZENE	3% - 6%	SARA313, DSL,CERCLA,HAPS,SARA312,VHAPS,VOC,TSCA,CA_Prop65 - California Proposition 65
0000071-43-2	BENZENE	Trace	SARA313, DSL,CERCLA,HAPS,SARA312,VHAPS,VOC,TSCA,RCRA,CA_Prop65 - California Proposition 65

SECTION 16) OTHER INFORMATION

OTHER INFORMATION

Note: As per GHS, category 1 is the greatest level of hazard within each class.

GLOSSARY

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; CA Prop65- California Proposition 65; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Version 1.0:

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First Edition.

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

SAFETY DATA SHEET

80-12069-8316
Nov 10, 2017

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

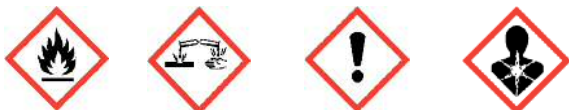
Product ID: 80-12069-8316
Product Name: 8316-B-CrownShield SB Epoxy, B-Side
Revision Date: Nov 10, 2017 **Date Printed:** Nov 13, 2017
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Crown Polymers Corp.
Address: 8550 W. Desert Inn Rd. Suite 102-125, Las Vegas, NV, US, 89117
Emergency Phone: Chemtrec:800-424-9300 (account: CCN1217) OR International:703-527-3887 (account:CCN1217)
Information Phone Number: (847) 659-0300
Fax: (847) 659-0310
Product/Recommended Uses: For Further Information, Refer to the Product Technical Data Sheet.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Acute aquatic toxicity - Category 3
Acute toxicity Dermal - Category 5
Acute toxicity Oral - Category 4
Aspiration Hazard - Category 1
Chronic aquatic toxicity - Category 3
Flammable Liquids - Category 2
Reproductive Toxicity - Category 1B
Serious Eye Damage - Category 1
Skin Corrosion - Category 1B
Skin Sensitizer - Category 1B
Specific Target Organ Toxicity - Repeated Exposure - Category 2
Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) - Category 3

Pictograms



Signal Word

Danger

Hazardous Statements - Physical

H225 - Highly flammable liquid and vapor

Hazardous Statements - Health

H313 - May be harmful in contact with skin
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H360 - May damage fertility or the unborn child.

H318 - Causes serious eye damage

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H373 - May cause damage to organs through prolonged or repeated exposure.

H336 - May cause drowsiness or dizziness

Hazardous Statements - Environmental

H402 - Harmful to aquatic life

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P273 - Avoid release to the environment.

P264 - Wash thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof [electrical/ventilating/lighting/...] equipment.

P242 - Use only non-sparking tools.

P243 - Take action to prevent static discharges.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P271 - Use only outdoors or in a well-ventilated area.

Precautionary Statements - Response

P312 - Call a POISON CENTER/doctor if you feel unwell.

P301 + P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 - Rinse mouth.

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P331 - Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P370 + P378 - In case of fire: Use dry chemical, carbon dioxide, foam to extinguish.
For detailed information, see Section-5 (Fire Fighting Measures)

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor.

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P363 - Wash contaminated clothing before reuse.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P321 - Specific treatment (see section 4 on this SDS).

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or a rash occurs: Get medical advice/attention.

P362 + P364 - Take off contaminated clothing. And wash it before reuse.

P314 - Get Medical advice/attention if you feel unwell.

Precautionary Statements - Storage

P405 - Store locked up.

P403 + P235 - Store in a well-ventilated place. Keep cool.

P403 + P405 - Store in a well-ventilated place. Store locked up.

Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000108-88-3	TOLUENE	16% - 30%
0001477-55-0	METHYLAMINE, M-PHENYLENE BIS	14% - 27%
0000098-54-4	PARATERTIARYBUTYLPHENOL	12% - 23%
NA	CYCLOALIPHATIC AMINE	10% - 19%
0003236-53-1	TRIMETHYL HEXAMETHYLENEDIAMINE	6% - 10%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

Skin Contact

Rinse/wash with lukewarm, gently flowing water and mild soap for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

Eye Contact

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Give 3 or 4 glasses of water to drink. Never give anything by mouth to an unconscious person.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media

If water is used, use very large quantities of cold water.

Specific Hazards in Case of Fire

Excessive pressure or temperature may cause explosive rupture of containers.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Care should always be exercised in dust/mist areas.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment

Appropriate dust or face mask to eliminate breathing foam dust particulates.

Personal Precautions

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

Soak up material with absorbent and shovel into a chemical waste container. Cover container, but do not seal, and remove from work area. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, call CHEMTREC (Chemical Transportation Emergency Center) at 800-424-9300.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Individuals with existing respiratory disease such as chronic bronchitis, emphysema, or asthma should not be exposed.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool dry area. Store liquid in containers above ground and surround by dikes to contain spills or leaks.

Do not cut, drill, grind, weld, or perform similar operations on or near containers.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended under the following conditions: emergency situations, when product vapor concentration is greater than 20 ppm for a period longer than 15 min., during repair and cleaning of equipment, during transfer or discharge of the product.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
METHYLAMINE, M-PHENYLENE BIS												
TOLUENE	200 (a)/ 300 ceiling	0.2	500ppm /10 minutes (a)		1,2			100	375	150	560	

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations
METHYLAMINE, M-PHENYLENE BIS				C 0.1		Eye, skin, GI irr	Skin
TOLUENE	20	0.2			A4	Visual impair; female repro; pregnancy loss	A4; BEI

(C) - Ceiling limit, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, GI - Gastrointestinal, impair - Impairment, irr - Irritation, repro - reproductive

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	7.51 lb/gal
Specific Gravity	0.90
VOC Regulatory	0.00 lb/gal
VOC Part A & B Combined	1.82 lb/gal
Appearance	Liquid
Odor Threshold	N.A.
Odor Description	Solvent

pH	N.A.
Water Solubility	N.A.
Flammability	N/A
Flash Point Symbol	N.A.
Flash Point	4 °C
Viscosity	N.A.
Lower Explosion Level	N.A.
Upper Explosion Level	N.A.
Vapor Pressure	N.A.
Vapor Density	Heavier than air
Freezing Point	N.A.
Melting Point	N.A.
Low Boiling Point	111 °C
High Boiling Point	N.A.
Auto Ignition Temp	N.A.
Decomposition Pt	N.A.
Evaporation Rate	Slower than ether
Coefficient Water/Oil	N.A.

SECTION 10) STABILITY AND REACTIVITY

Stability

Material is stable at standard temperature and pressure.

Conditions to Avoid

Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause buildup of pressure.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

This product will react with epoxies, isocyanates, and strong oxidizing agents. Some reactions can be violent.

Hazardous Decomposition Products

Combustion products: organic vapors and thermal decomposition fragments.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation

Causes severe skin burns and eye damage

Serious Eye Damage/Irritation

Any contact should not be left untreated.

Causes serious eye damage

Respiratory/Skin Sensitization

Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12-24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness.

May cause an allergic skin reaction

Carcinogenicity

No data available

Germ Cell Mutagenicity

No data available

Reproductive Toxicity

Specific Target Organ Toxicity - Single Exposure

May cause drowsiness or dizziness

Specific Target Organ Toxicity - Repeated Exposure

Repeated exposure generally aggravates the following medical conditions : Cardiovascular disease and Chronic respiratory disease.

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard

May be fatal if swallowed and enters airways

Acute Toxicity

If ingested : In humans, irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion, and injury may be severe and cause death.

May be harmful in contact with skin

Harmful if swallowed

0000108-88-3 TOLUENE

LC50 (rat): 8800 ppm (4-hour exposure) (2)

LC50 (rat): 6000 ppm (6-hour exposure) (3)

LD50 (oral, rat): 2600 to 7500 mg/kg (3,5,11,17)

LD50 (oral, neonatal rat): less than 870 mg/kg (3)

LD50 (dermal, rabbit): 12,225 mg/kg (reported as 14.1 ml/kg) (1)

Chronic Exposure

0000108-88-3 TOLUENE

TERATOGENIC EFFECTS:Toluene has been Classified as POSSIBLE for humans.

Potential Health Effects - Miscellaneous

0000108-88-3 TOLUENE

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, respiratory system, skin. Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heart beats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information

UN/NA #: 3469
UN Proper Shipping Name: PAINT, FLAMMABLE, CORROSIVE
Hazard Class (Sub Risk): 3 (8)
Packing Group: II
Placard: FLAMMABLE AND CORROSIVE

IMDG Information

UN/NA #: 3469
UN Proper Shipping Name: PAINT, FLAMMABLE, CORROSIVE
Hazard Class (Sub Risk): 3 (8)
Packing Group: II
Placard: FLAMMABLE AND CORROSIVE
Marine Pollutant: NO DATA AVAILABLE

IATA Information

UN/NA #: 3469
UN Proper Shipping Name: PAINT, FLAMMABLE, CORROSIVE
Hazard Class (Sub Risk): 3 (8)
Packing Group: II
Placard: FLAMMABLE AND CORROSIVE

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000108-88-3	TOLUENE	16% - 30%	SARA313, DSL, CERCLA, HAPS, SARA312, VHAPS, VOC, TSCA, RCRA, CA_Prop65 - California Proposition 65
0001477-55-0	METHYLAMINE, M-PHENYLENE BIS	14% - 27%	DSL, SARA312, TSCA
0000098-54-4	PARATERTIARYBUTYLPH ENOL	12% - 23%	DSL, SARA312, TSCA
0003236-53-1	TRIMETHYL HEXAMETHYLENEDIAMIN E	6% - 10%	DSL, SARA312, VOC, TSCA

SECTION 16) OTHER INFORMATION

OTHER INFORMATION

Note: As per GHS, category 1 is the greatest level of hazard within each class.

GLOSSARY

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; CA Prop65- California Proposition 65; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and

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