

Safety Data Sheet Crown Epoxy Thinner

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: Crown Epoxy Thinner

SDS number: CR.ET Synonym(s): Solvent blend

1.2 Relevant identified uses of the substance or mixture and uses advised against

General use: Epoxy thinner
Uses advised against: None known

1.3 Details of the supplier and of the safety data sheet

Manufacturer/Distributor Packaging Service Co., Inc. 1904 Mykawa Road Pearland, TX 77581-3210 USA 1-281-485-1458

1.4 Emergency telephone number

CHEMTREC: 1-800-424-9300 (USA) CANUTEC: 1-613-996-6666 (Canada)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Mixture

Classification in accordance with 29 CFR 1910 (OSHA HCS) and Regulation EC No. 1272/2008

Flammable Liquid - Category 2 [H225] Acute Toxicity, Oral - Category 5 [H303] Aspiration Hazard - Category 1 [H304] Acute Toxicity, Dermal - Category 4 [H312]

Skin Irritant - Category 2 [H315] Eye Irritant - Category 2A [H319]

Acute Toxicity, Inhalation - Category 4 [H332]

Single Target Organ Toxicity, Single Exposure - Category 3; STOT SE 3 [H336] Single Target Organ Toxicity, Repeated Exposure - Category 2; STOT RE 2 [H373]

2.2 Label elements

Hazard Symbols





GHS08



GHS02

GHS07

Signal word: Danger

Hazard statement(s): H226 - Highly flammable liquid and vapor

H303 - May be harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H312 - Harmful in contact with skin H315 - Causes skin irritation H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H336 - May cause drowsiness or dizziness

H373 - May cause damage to the auditory, respiratory and central nervous systems, the liver, kidneys and blood

through prolonged and repeated use

Precautionary statements [Prevention]

P210 - Keep away from heat, open flames and hot surfaces. No smoking.

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.

P241 + P242 - Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe fumes, mist or vapor.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves, protective clothing and eye protection.

[Response] P301 + P311 + P310 - IF SWALLOWED: DO NOT induce vomiting. Immediately call a POISON CENTER or doctor.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water

or shower.

P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or a doctor if you feel unwell.

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

P321 - Specific treatment: Call a POISON CENTER or doctor if you feel unwell. Refer to Section 4 of this SDS.

P332 + P337 + P313 - If skin irritation occurs or if eye irritation persists: Get medical attention.

P362 - Take off contaminated clothing and wash before reuse.

P370 + P378 - In case of fire: Use water fog, foam, dry chemical or carbon dioxide for extinction.

[Storage] P405 + P403 + P235 - Store locked up in a well-ventilated place. Keep container tightly closed. Keep cool. [Disposal] P501 - Dispose of contents and containers in accordance with national and local regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Repeated exposure may cause skin dryness or cracking.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

% by Weight	Ingredient	CAS Number	EC Number	Annex Number	GHS Classification
40 - 60	Xylenes, Mixed	1330-20-7	215-535-7	601-022-00-9	H226, H312, H315, H336
15 - 35	Methyl Isobutyl Ketone	108-10-1	203-550-1	606-004-00-4	H225, H319, H332, H336
15 - 35	Isopropanol	67-63-0	200-661-7	603-117-00-0	H225, H319, H336
5 - 15	Ethylbenzene	100-41-4	202-849-4	601-023-00-4	H225, H304, H332, H373
0.05 - 0.5	Cumene	98-82-8	202-704-5	601-024-00-X	H226, H304, H335, H411

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identify and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with the applicable provisions of paragraph (i).

There are additional no ingredients present in this product which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product mist or vapor causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. If unconscious, maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If irritation persists or if the victim feels unwell, seek medical attention.

Eyes: Immediately flush eyes with large amounts of water or saline solution for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after first 2 minutes and continue rinsing. If irritation persists seek medical attention, preferably from an ophthalmologist.

Skin: Flush skin with large amounts of water while removing contaminated clothing. Wash the affected area with soap and water followed by thorough rinsing. Wash contaminated clothing and shoes before reuse. If irritation persists, seek medical attention.

Ingestion: Rinse mouth with water if the victim is conscious. Remove dentures, if present. DO NOT induce vomiting unless directed to do so by medical personnel. Vomiting may occur spontaneously. To prevent aspiration of material into the lungs, lay the victim on one side with the head lower than the waist. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed Potential health symptoms and effects

Eyes: Causes eye irritation with inflammation, discomfort, tearing and blurred vision. Vapor or mist can cause eye irritation. May cause slight corneal injury.

Skin: Causes skin irritation with localized redness, itching and discomfort. Prolonged contact with unprotected skin may cause defatting of the skin and dermatitis. Prolonged contact may cause chemical burns and blistering. Harmful if absorbed through the skin.

Inhalation: Harmful if inhaled. May cause respiratory tract irritation with headache, cough and shortness of breath. May cause nausea, vomiting, drowsiness, dizziness, anesthetic effects, narcosis, fatigue, cyanosis, apnea and cardiac arrest. May cause central nervous system depression and other central nervous system effects including incoordination, impaired mental and physical abilities, speech impairment, unconsciousness, coma and death. Lung irritation may lead to chemical pneumonitis and pulmonary edema. May cause damage to the respiratory tract, liver and kidneys.

Ingestion: Harmful if swallowed. Causes irritation of the digestive tract with nausea, vomiting, abdominal pain and diarrhea. May cause central nervous system depression characterized by excitement, followed by headache, dizziness, drowsiness and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause liver and kidney damage. Metabolic acidosis may occur. Ingestion of significant amounts of ketones may cause respiratory depression. This material can get into the lungs during swallowing or vomiting causing lung inflammation and chemical pneumonitis, which maybe fatal. Symptoms of aspiration into the lungs include coughing, gasping, choking, shortness of breath, bluish colored skin, rapid breathing and rapid heart rate.

Chronic: Individuals with pre-existing skin conditions and respiratory disorders may be more susceptible to the effects of this product. Prolonged or repeated skin contact may cause defatting of the skin and dermatitis or aggravate existing skin conditions. Chronic exposure may cause reversible eye damage, dyspnea (labored breathing), confusion, dizziness, apprehension, memory loss, headache, tremors, weakness, anorexia, nausea, tinnitus, irritability, thirst, anemia and hyperplasia, but not destruction of the bone marrow. May have toxic effects on the liver and kidneys, especially after exposure to high concentrations of solvent. Effects may be delayed. Impaired central nervous system functions from pre-existing disorders may be aggravated by exposure to this product. Xylene is a confirmed animal carcinogen. Methyl Isobutyl Ketone, Ethylbenzene and

Cumene are possible human carcinogens. Isopropanol may be a human carcinogen. Exposure to this product may harm the unborn child. Refer to Section 11.2

4.3 Indication of any immediate medical attention and special treatment needed

Advice to doctor and hospital personnel

If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider active charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: Use extinguishing media such as water spray or fog, carbon dioxide, foam and dry chemical. **Unsuitable methods of extinction:** Water jets or streams may spread the fire. This material floats on water.

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapor! Vapors are heavier than air and can travel along the ground to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Exposure to ignition sources (e.g cell phones) can ignite vapors, causing a flash fire. Closed containers may explode due to the buildup of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention. **Explosion hazards:** Avoid sources of ignition. Vapors may form an explosive mixture with air, especially in confined spaces. Ground and bond containers in storage and when container is in use.

5.3 Advice for firefighters

Firefighters should wear full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Be aware that burning liquid will float on water. Firefighters must control runoff to prevent environmental contamination. Notify appropriate authorities of potential fire and explosion hazard if liquid enters sewers or waterways.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Wear appropriate protective clothing and equipment designated in Section 8.2. Ventilate the area. Remove all sources of ignition. NO SMOKING. Clean up spills immediately. Spills create a slip hazard.

6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements.

6.3 Methods and materials for containment and cleaning up

Approach spill from upwind direction. DO NOT flush spill down the drain. Cover drains and contain spill. Cover spill with a large quantity of inert absorbent. Do not use combustible material such as sawdust. Collect material using non-sparking tools and place into an approved container for proper disposal. Observe possible material restrictions (Sections 7.2 and 10.5). Do not allow material or runoff from rinsing contaminated areas to enter floor drains or storm drains and ditches that lead to waterways. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

For indications about waste treatment, see Section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not inhale mist or vapor. NO SMOKING. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator. Open containers slowly to control possible pressure release. Wash contaminated clothing and shoes thoroughly before reuse.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Vapors are heavier than air and can travel along the ground to a source of ignition and flash back.

7.2 Conditions for safe storage, including any incompatibilities

Store in dry, cool, well-ventilated areas away from incompatible materials (see Section 10.5), food and drink. Keep away from heat and ignition sources. Transfer only to approved containers having correct labeling. Keep containers tightly closed when not in use. Protect containers against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers are hazardous when empty as they contain product residues. Do not cut, drill, weld, braze, solder grind or perform similar operations on or near empty containers. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Do not take internally. Keep out of reach of children.

7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

8.1 Control parameters

Occupational exposure limit values

CAS Number	Ingredient	OSHA PEL	ACGIH TLV	NIOSH
1330-20-7	Xylene	100 ppm; 435 mg/m ³ TWA	100 ppm; 435 mg/m ³ TWA	100 ppm; 435 mg/m³ TWA 150 ppm; 655 mg/m³ 900 ppm IDLH
67-63-0	Isopropanol	400 ppm; 980 mg/m ³ TWA	400 ppm; 941 mg/m³ TWA 400 ppm; 984 mg/m³ STEL	400 ppm; 980 mg/m ³ TWA
108-10-1	Methyl Isobutyl Ketone	100 ppm; 410 mg/m ³	20 ppm TWA 75 ppm STEL	50 ppm; 205 mg/m ³ TWA 5,000 ppm IDLH
100-41-4	Ethylbenzene	100 ppm; 435 mg/m ³ TWA	20 ppm; 87 mg/m³ TWA	100 ppm; 435 mg/m³ TWA 125 ppm; 545 mg/m³ STEL 800 ppm IDLH (LEL)
98-82-8	Cumene	50 ppm; 245 mg/m³ TWA Skin	50 ppm; 246 mg/m³; Skin 400 ppm; 984 mg/m³ STEL	50 ppm; 245 mg/m ³ ; Skin 900 ppm (10% LEL)

A "skin" notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material, including eyes and mucous membranes, either by direct contact with vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposure should be considered.

8.2 Exposure controls

Engineering measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, smoking or using the lavatory.

Eye/face protection: Wear safety glasses with unperforated side shields or protective splash goggles during use.

Hand Protection: Wear gloves recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

Skin protection: Wear protective clothing. Wear protective boots if the situation requires.

Respiratory protection: Always use an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying respirators are appropriate use a half-mask respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Environmental exposure controls: Do not empty into drains.

PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.







SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Clear, colorless liquid

Odor Solvent

Odor ThresholdNo data availableMolecular WeightNot applicableChemical FormulaNot applicablepHNo data available

Freezing/Melting Point

-75 °C (-103 °F) [estimate]

Boiling Point, Range

82 - 139 °C (180 - 282 °F)

Evaporation Rate

0.97 (n-BuAc = 1)

Evaporation Rate

Flammability (solid, gas)

Flash Point Range
Autoignition Temperature

Decomposition Temperature

Lower Explosive Limit (LEL)

Upper Explosive Limit (UEL)

O.97 (n-BuAc =1)

Not applicable

13 °C (56 °F), TCC

398 °C (750 °F)

No data available

1.4 % (v)

No data available

 Vapor Pressure
 17 mm Hg @ 20 °C

 Vapor Density
 3.1 (Air = 1)

 Specific Gravity
 0.834

Density 0.834 g/ml (6.95 lb/gal)
Viscosity No data available

Solubility in Water Miscible

Partition Coefficient: n-octanol/water log Pow = 0.5 - 3.2

Oxidizing Properties Not applicable

Explosive Properties Not applicable

Volatiles by Weight @ 21 °C 100%

9.2 Other data

Flammability Classification IB

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal handling conditions and use.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Vapors may form explosive mixture with air. Reacts with strong oxidizing agents.

Hazardous polymerization will not occur.

10.4 Conditions to avoid

High temperatures, sources of ignition, hot surfaces, contact with incompatible materials

10.5 Incompatible materials

Strong oxidizing agents, strong reducing agents, strong acids, alkalis, caustics, acid anhydrides, halogenated compounds, aluminum, rubber, various plastics

10.6 Hazardous decomposition products

Thermal decomposition products include oxides of carbon and hydrocarbons.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity

LD₅₀, rat: >3,390 mg/kg [calculated]

Acute inhalation toxicity

LD₅₀, rat: 32.8 - 65-6 mg/m³, 4 h [calculated]

Acute dermal toxicity

LD₅₀, rabbit: 5,777 mg/kg [calculated]

Skin irritation

Causes skin irritation.

Eye irritation

Causes serious eye irritation.

Sensitization

No data available

Genotoxicity in vitro

No data available

Mutagenicity

No data available

Specific organ toxicity - single exposure

May cause drowsiness or dizziness. May be irritating to the respiratory tract.

Specific organ toxicity - repeated exposure

Causes damage to the auditory, respiratory and central nervous systems, the liver, kidneys and blood through prolonged and repeated use.

Aspiration hazard

May be fatal if swallowed and enters the airways.

11.2 Further information

Xylene (CAS #1330-20-7): IARC, Group 3 carcinogen - *Not classifiable as to its carcinogenicity to humans*. ACGIH, A4 - *Not classifiable as a human carcinogen*. Not listed as a carcinogen by NTP or OSHA. Xylene is a developmental hazard and may harm the unborn child based on animal information. It has been associated with low birth weight or size and learning disabilities.

Methyl Isobutyl Ketone (CAS #108-10-1): IARC Group 2B carcinogen - Possibly carcinogenic to humans. ACGIH A3 carcinogen - Confirmed animal carcinogen with unknown relevance to humans. Kidney effects and/or tumors have been observed in male rats. This substance has been toxic to the fetus in laboratory animals at doses toxic to the mother. It did not cause birth defects in test animals.

Isopropanol (CAS #67-63-0): IARC, Group 3 carcinogen - Not classifiable as to its carcinogenicity to humans. Not listed as a carcinogen by ACGIH, NTP or OSHA.

Ethylbenzene (CAS #100-41-0): IARC, Group 2B carcinogen - *Possibly carcinogenic to humans*; ACGIH, A3 - *Confirmed animal carcinogen with unknown relevance to humans*. Not listed as a carcinogen by NTP or OSHA. Ethylbenzene may have teratogenic effects based upon results of laboratory experiments.

Cumene (CAS #98-82-8): IARC, Group 2B carcinogen - Possibly carcinogenic to humans; NTP - Reasonably anticipated to be a human carcinogen. Not listed as a carcinogen by ACGIH or OSHA.

12.1 Toxicity

This product is toxic to aquatic organisms. Large discharges or spills of this material to the environment may be harmful to aquatic organisms.

12.2 Persistence and degradability

This product is expected to biodegrade over time.

12.3 Bioaccumulation potential

The bioaccumulation potential for this product is low.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Additional ecological information

Do not allow material to run into surface waters, wastewater or soil.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Methods of disposal: The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

RCRA F-Series: No listings above the reportable threshold (de minimis)

RCRA U-Series Xylene(CAS #1330-20-7), U239 Methyl Isobutyl Ketone (CAS #108-10-1), U161 Cumene (CAS #98-82-8), U055

SECTION 14 - TRANSPORT INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

USA DOT (Ground Transportation) - Bulk and Non-bulk

Proper Shipping Name: Paint related materials

Hazard Class: 3

UN/NA: UN1263 Packing Group: ||

NAERG: Guide #128

Packaging Authorization: Non-Bulk: 49 CFR 173.173; Bulk: 173.242

Packaging Exceptions: 49 CFR 173.150

Consumer Products: When transported as a limited quantity or a consumer commodity, the maximum net capacity

specified in §173.150(b)(2) of this subchapter for inner packagings may be increased to 5 I (3 gallons).

Drum Label(s):

IMO/IMDG (Water Transportation)

Proper Shipping Name: Paint related materials

Hazard Class: 3

UN/NA: UN1263
Packing Group: II
Marine Pollutant: No
EMS Number: F-E, S-E

ICAO/IATA (Air Transportation)

Proper Shipping Name: Paint related materials

Hazard Class: 3 UN/NA: UN1263 Packing Group: II

Quantity Limitations: 49 CFR 175.27 and 175.75 - Cargo Aircraft Only: 60 I; Passenger Aircraft: 5 I

RID/ADR (Rail Transportation)

Proper Shipping Name: Paint related materials

Hazard Class: 3 UN/NA: UN1263 Packing Group: ||

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

U. S. Federal Regulations

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200. **OSHA Process Safety Management Standard:** This product is not regulated under OSHA PSM Standard 29 CFR 1910.119. **EPA Risk Management Planning Standard:** This product is not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

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EPA Federal Insecticide, Fungicide and Rodenticide Act: This product is not a registered Pesticide under the FIFRA, 40 CFR Part 150. **Toxic Substance Control Act (TSCA) Inventory:** All of the substances in this product are listed on the TSCA Inventory. This product is not subject to TSCA 12(b) Export Notification.

Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b)) and 1310.4(f)(2)) and Chemical Code Number *Methyl Isobutyl Ketone (CAS #108-10-1):* List 2, DEA Chemical code 6594; 35% by Weight or Volume; exports only; limit applies to methyl isobutyl ketone or any combination of acetone, ethyl ether, 2-butanone, methyl isobutyl ketone, and toluene if present in the mixture by summing the concentrations for each chemical.

Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12(c)) and Code Number No listing

Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals No listing

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA 313 Information: Xylene, Methyl Isobutyl Ketone, Isopropanol, Ethylbenzene and Cumene are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification: No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains the following CERCLA reportable substances: Xylene (CAS #1330-20-7): RQ - 4.54 kg (1,000 lbs) Ethylbenzene (CAS #100-41-4): RQ - 454 kg (1,000 lbs)

Methyl Isobutyl Ketone (CAS #108-10-1): RQ = 2,268 kg (5,000 lbs)

Cumene (CAS #98-82-8): RQ -2,268 kg (5,000 lbs)

Clean Air Act (CAA)

Xylene, Methyl Isobutyl Ketone, Ethylbenzene and Cumene are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b). This product does not contain any Class 1 Ozone depletors.

This product does not contain any Class 2 Ozone depletors.

Clean Water Act (CWA)

Methyl Isobutyl Ketone, Ethylbenzene and Cumene are listed as Hazardous Substances under the CWA.

Ethylbenzene is listed as a Priority Pollutant under the CWA.

Ethylbenzene is listed as Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

Methyl Isobutyl Ketone, Ethylbenzene and Cumene are known to the state of California to cause cancer.

Other U.S. State Inventories

Xylene (CAS #1330-20-7) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, ME, MA, MN, NJ, NY, PA, RI, WA.

Methyl Isobutyl Ketone (CAS #108-10-1) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/ Air Pollutants lists: CA, DE, ID, IL, MA, MN, NJ, NY, PA, RI, WI, WV.

Isopropanol (CAS #67-63-0) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants

lists: CA, DE, ID, ME, MA, MN, NJ, NY, PA, RI, WA, WI.

Ethylbenzene (CAS #100-41-1) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, IL, ME, MA, MN, NJ, NY, PA, RI, WA, WI.

Cumene (CAS #98-82-8) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, IL, MA, MN, NJ, NY, PA, RI, WA, WV, WI.

Canada

WHMIS Hazard Classification

Highly flammable liquid and vapor May cause drowsiness or dizziness

May be fatal if swallowed and enters airways Suspected of causing cancer

Causes skin irritation and serious eye irritation May cause damage to organs through prolonged or repeated exposure

Harmful if inhaled Toxic to aquatic life with long lasting effects

Canadian National Pollutant Release Inventory (NPRI): Xylene, Isopropanol, Methyl Isobutyl Ketone, Ethylbenzene and Cumene are listed. European Economic Community

WGK, Germany (Water danger/protection): 2 (hazard to waters)

Global Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
Canada	Domestic Substance List (DSL)	Yes
Canada	Non-Domestic Substance List (NDSL)	No
Europe	Inventory of New and Existing Chemicals (EINECS)	Yes
United States	Toxic Substance Control Act (TSCA)	Yes
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (KECL)	Yes
Philippines	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

^{*}Yes - All components of this product are in compliance with the inventory requirements administered by the governing country.

No - One or more components of this product are not on the inventory or are exempt from listing.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16 - OTHER INFORMATION

Hazardous Material Information System (HMIS)



C = safety glasses, gloves and an apron

HMIS Hazard Rating Legend

0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic Health Hazard

NFPA Hazard Rating Legend

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

National Fire Protection Association (NFPA) Flammability



Instability

Special

Full Text of GHS Hazard Phrases Referenced in Section 3 (not covered in Section 2)

H226 - Flammable liquid and vapor

H411 - Toxic to aquatic life with long lasting effects

Abbreviation Key

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ADR Cord Dangereux Routier (European regulations concerning the international transport of dangerous by road) CAS Chemical Abstract Services CHR Code of Federal Regulations DOT Department of Transportation EMS Guide Emergency Response Procedures for Ships Carrying Dangerous Goods ERG Emergency Response Guide Book FDA Food and Drug Administration GHS Globally Harmonized System of Classification and Labelling of Chemicals (GHS) HCS Hazard Communication Standard HCS Hazard Communication Standard International Agency for Research on Cancer IATA International Civil Aviation Organization International Maritime Organization International Maritime Dangerous Goods IND National Institute for Occupational Safety North America North American Emergency Response Guide Book Noth American Emergency Response Notical Internsticula Safety Noth American Emergency Response Guide Book Noth American Emergency Response Noth American Emergency Response Not Amtional International Safety Not Pational Intericula Safety Not Amtional Intericula Safety Noth American Emergency Response PEL Pational Intericula Safety Not American Emergency Notucle Intericula Safety Not Persistent Boocacumulating Noth American Emergency Notucle organic Compounds Noth American Emergency Notucle Pasitent And Very Bioaccumulating WHMIS Workplace Hazardous Materials Information System	ACGIH	American Conference of Governmental Industrial Hygienists	mppcf	Millions of Particles Per Cubic Foot
CAS Chemical Abstract Services NTP National Institute for Occupational Safety CFR Code of Federal Regulations OSHA Occupational Safety and Health Administration DOT Department of Transportation PBT Persistent, Bioaccumulating and Toxic EMS Guide Emergency Response Procedures for Ships Carrying Dangerous Goods PMCC Pensky-Martens Closed Cup EPA Environmental Protection Agency ppm Parts Per Million ERG Emergency Response Guide Book RCRA Resource Conservation and Recovery Act FDA Food and Drug Administration RID Dangerous Goods by Rail GHS Globally Harmonized System of Classification and RQ Reportable Quantity Labelling of Chemicals (GHS) TCC/Tag Tagliabue Closed Cup HCS Hazard Communication Standard TLV Threshold Limit Value IARC International Agency for Research on Cancer TSCA Toxic Substance Control Act IATA International Civil Aviation Organization UN United Nations IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods NTP National Institute for Occupational Civil Aviation Organization IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods	ADR	Accord Dangereux Routier (European regulations	NA	North America
CAS Chemical Abstract Services NTP National Toxicology Program CFR Code of Federal Regulations OSHA Occupational Safety and Health Administration DOT Department of Transportation PBT Persistent, Bioaccumulating and Toxic EMS Guide Emergency Response Procedures for Ships PEL Permissible Exposure Limit Carrying Dangerous Goods PMCC Pensky-Martens Closed Cup EPA Environmental Protection Agency ppm Parts Per Million ERG Emergency Response Guide Book RCRA Resource Conservation and Recovery Act FDA Food and Drug Administration RID Dangerous Goods by Rail GHS Globally Harmonized System of Classification and RQ Reportable Quantity Labelling of Chemicals (GHS) TCC/Tag Tagliabue Closed Cup HCS Hazard Communication Standard TLV Threshold Limit Value IARC International Agency for Research on Cancer TSCA Toxic Substance Control Act IATA International Civil Aviation Organization UN United Nations IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods VPVB Very Persistent and Very Bioaccumulating		concerning the international transport of dangerous	NAERG	North American Emergency Response Guide Book
CFR Code of Federal Regulations DOT Department of Transportation EMS Guide Emergency Response Procedures for Ships Carrying Dangerous Goods EPA Environmental Protection Agency ERG Emergency Response Guide Book FDA Food and Drug Administration GISS Glibally Harmonized System of Classification and Labelling of Chemicals (GHS) HCS Hazard Communication Standard IATA International Agency for Research on Cancer IATA International Civil Aviation Organization IMDG International Maritime Dangerous Goods OSHA Occupational Safety and Health Administration PBT Persistent, Bioaccumulating and Toxic PEL Permissible Exposure Limit Permissible Exposure Limit		by road)	NIOSH	National Institute for Occupational Safety
DOT Department of Transportation PBT Persistent, Bioaccumulating and Toxic EMS Guide Emergency Response Procedures for Ships Carrying Dangerous Goods PMCC Pensky-Martens Closed Cup EPA Environmental Protection Agency ppm Parts Per Million ERG Emergency Response Guide Book RCRA Resource Conservation and Recovery Act FDA Food and Drug Administration RID Dangerous Goods by Rail GHS Globally Harmonized System of Classification and RQ Reportable Quantity Labelling of Chemicals (GHS) TCC/Tag Tagliabue Closed Cup HCS Hazard Communication Standard TLV Threshold Limit Value IARC International Agency for Research on Cancer TSCA Toxic Substance Control Act IATA International Air Transport Association TWA Time-Weighted Average ICAO International Civil Aviation Organization UN United Nations IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods	CAS	Chemical Abstract Services	NTP	National Toxicology Program
EMS Guide Emergency Response Procedures for Ships Carrying Dangerous Goods PMCC Pensky-Martens Closed Cup EPA Environmental Protection Agency ppm Parts Per Million ERG Emergency Response Guide Book RCRA Resource Conservation and Recovery Act FDA Food and Drug Administration RID Dangerous Goods by Rail GHS Globally Harmonized System of Classification and Labelling of Chemicals (GHS) TCC/Tag Tagliabue Closed Cup HCS Hazard Communication Standard TLV Threshold Limit Value IARC International Agency for Research on Cancer IATA International Air Transport Association TWA Time-Weighted Average ICAO International Civil Aviation Organization UN United Nations IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods VPVB Very Persistent and Very Bioaccumulating	CFR	Code of Federal Regulations	OSHA	Occupational Safety and Health Administration
Carrying Dangerous Goods EPA Environmental Protection Agency ERG Emergency Response Guide Book FDA Food and Drug Administration GHS Globally Harmonized System of Classification and Labelling of Chemicals (GHS) HCS Hazard Communication Standard IARC International Agency for Research on Cancer IATA International Air Transport Association ICAO International Civil Aviation Organization IMDG International Maritime Dangerous Goods PMCC Pensky-Martens Closed Cup Parts Per Million RCRA Resource Conservation and Recovery Act RID Dangerous Goods by Rail RQ Reportable Quantity TCC/Tag Tagliabue Closed Cup TLV Threshold Limit Value TSCA Toxic Substance Control Act ITA International Air Transport Association TWA Time-Weighted Average UN United Nations IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods	DOT	Department of Transportation	PBT	Persistent, Bioaccumulating and Toxic
EPA Environmental Protection Agency ERG Emergency Response Guide Book FDA Food and Drug Administration GHS Globally Harmonized System of Classification and RQ Reportable Quantity Labelling of Chemicals (GHS) HCS Hazard Communication Standard INTERITY International Agency for Research on Cancer IATA International Air Transport Association ICAO International Civil Aviation Organization IDLH Immediately Dangerous Goods ERQ Reportable Quantity TCC/Tag Tagliabue Closed Cup TLV Threshold Limit Value TSCA Toxic Substance Control Act TWA Time-Weighted Average UN United Nations UN United Nations IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods VPVB Very Persistent and Very Bioaccumulating	EMS Guide	Emergency Response Procedures for Ships	PEL	Permissible Exposure Limit
ERG Emergency Response Guide Book RCRA Resource Conservation and Recovery Act FDA Food and Drug Administration RID Dangerous Goods by Rail GHS Globally Harmonized System of Classification and Labelling of Chemicals (GHS) TCC/Tag Tagliabue Closed Cup HCS Hazard Communication Standard TLV Threshold Limit Value IARC International Agency for Research on Cancer TSCA Toxic Substance Control Act IATA International Air Transport Association TWA Time-Weighted Average ICAO International Civil Aviation Organization UN United Nations IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods VPvB Very Persistent and Very Bioaccumulating		Carrying Dangerous Goods	PMCC	Pensky-Martens Closed Cup
FDA Food and Drug Administration RID Dangerous Goods by Rail GHS Globally Harmonized System of Classification and Labelling of Chemicals (GHS) TCC/Tag Tagliabue Closed Cup HCS Hazard Communication Standard TLV Threshold Limit Value IARC International Agency for Research on Cancer TSCA Toxic Substance Control Act IATA International Air Transport Association TWA Time-Weighted Average ICAO International Civil Aviation Organization UN United Nations IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods VPVB Very Persistent and Very Bioaccumulating	EPA	Environmental Protection Agency	ppm	Parts Per Million
GHS Globally Harmonized System of Classification and Labelling of Chemicals (GHS) HCS Hazard Communication Standard International Agency for Research on Cancer IATA International Air Transport Association ICAO International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods RQ Reportable Quantity Tagliabue Closed Cup Threshold Limit Value TSCA Toxic Substance Control Act Time-Weighted Average UN United Nations VOC Volatile Organic Compounds VPVB Very Persistent and Very Bioaccumulating	ERG	Emergency Response Guide Book	RCRA	Resource Conservation and Recovery Act
Labelling of Chemicals (GHS) HCS Hazard Communication Standard IARC International Agency for Research on Cancer IATA International Air Transport Association ICAO International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods TCC/Tag Tagliabue Closed Cup Threshold Limit Value TsCA Toxic Substance Control Act Time-Weighted Average UN United Nations VOC Volatile Organic Compounds VPVB Very Persistent and Very Bioaccumulating	FDA	Food and Drug Administration	RID	Dangerous Goods by Rail
HCS Hazard Communication Standard IARC International Agency for Research on Cancer IATA International Air Transport Association ICAO International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMPG International Maritime Dangerous Goods TLV Threshold Limit Value Toxic Substance Control Act Time-Weighted Average UN United Nations VOC Volatile Organic Compounds VPVB Very Persistent and Very Bioaccumulating	GHS	Globally Harmonized System of Classification and	RQ	Reportable Quantity
IARC International Agency for Research on Cancer IATA International Air Transport Association ICAO International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods TSCA Toxic Substance Control Act Time-Weighted Average UN United Nations VOC Volatile Organic Compounds VPVB Very Persistent and Very Bioaccumulating		Labelling of Chemicals (GHS)	TCC/Tag	Tagliabue Closed Cup
IATA International Air Transport Association ICAO International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods TWA Time-Weighted Average UN United Nations VOC Volatile Organic Compounds VPVB Very Persistent and Very Bioaccumulating	HCS	Hazard Communication Standard	TLV	Threshold Limit Value
ICAO International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods UN United Nations VOC Volatile Organic Compounds VPVB Very Persistent and Very Bioaccumulating	IARC	International Agency for Research on Cancer	TSCA	Toxic Substance Control Act
IDLH Immediately Dangerous to Life and Health VOC Volatile Organic Compounds IMDG International Maritime Dangerous Goods VPvB Very Persistent and Very Bioaccumulating	IATA	International Air Transport Association	TWA	Time-Weighted Average
IMDG International Maritime Dangerous Goods vPvB Very Persistent and Very Bioaccumulating	ICAO	International Civil Aviation Organization	UN	United Nations
Vi V V V V V V V V V V V V V V V V V V	IDLH	Immediately Dangerous to Life and Health	VOC	Volatile Organic Compounds
IMO International Maritime Organization WHMIS Workplace Hazardous Materials Information System	IMDG	International Maritime Dangerous Goods	vPvB	Very Persistent and Very Bioaccumulating
	IMO	International Maritime Organization	WHMIS	Workplace Hazardous Materials Information System

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