

**Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

1.1. Product Identifier: E400/E400X Part B  
- Product Name: Tough Epoxy Coating Coating  
- Product reference: E400/E400X Part B (Top Coat)

**1.2. Product Use:**  
Tough Epoxy Coating

**1.3. Manufacturer's Name:**  
**CAGE Code: 14439**  
Flamemaster Corp.  
Chem Seal Division  
13576 Desmond Street  
Pacoima, CA 91333 – USA

**1.3.1 Suppliers Name ( if not manufacturer )**

**Technical Contact:**  
Flamemaster Corp.  
Tel: 818-890-1401  
Fax: 818-890-6001  
[www.flamemaster.com](http://www.flamemaster.com)

**Emergency Contact Information :**  
See Below

| Specification | AS1129  | CATALYST PART B  |
|---------------|---|--|
| <b>NSN:</b>   | <b>6850-01-067-7586</b><br>E-400 T/C Haze Grey Pint Kit | <b>6850-00-009-5032</b><br>E-400/E400X T/C White Quart Kit |

**Emergency Contact:**

CHEMTEL: WWW.CHEMTELINE.COM

Flamemaster Corporation Contract Number MIS2644301

Shipments of hazardous materials within United States, Canada, Puerto Rico, and U.S. Virgin Island should reference Chemtel's toll free phone number: 1-800-255-3924 - Reference Number MIS2644301

Shipments and safety applications outside of United States, Canada, Puerto Rico, and the U.S. Virgin Islands must reference Chemtel phone number +1-813-248-0585 - Reference Number MIS2644301

Collect Calls will be accepted. To ensure a bilingual operator please call collect.

Shipments originating in U.S.A. and going overseas must use both numbers.

Shipments originating overseas and destined for US, Canada, Puerto Rico or the Virgin Islands must also use both numbers. Calls originating on board vessels should follow normal ship to shore protocols. Use international access number and alert the ship to shore operator you are involved in an emergency incident.

Shipments of hazardous materials within the listed countries should reference Chemtel's in-country phone numbers:

Australia : 1-300-954-583 : Reference Number MIS2644301

Brazil : 0-800-591-6042 : Reference Number MIS2644301

China : 400-120-0751 : Reference Number MIS2644301

India : 000-800-100-4086 : Reference Number MIS2644301

Mexico : 01-800-099-0731 : Reference Number MIS2644301

Section -2. HAZARD ( S ) IDENTIFICATION

**OSHA/HCS STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

**CLASSIFICATION OF THE MIXTURE:**

FLAMMABLE LIQUID - CATEGORY 2

ASPIRATION HAZARD - CATEGORY 1

ACUTE TOXICITY, ORAL - CATEGORY 4

ACUTE TOXICITY (INHALATION) - CATEGORY 4

CARCINOGENICITY - Category 2

SKIN CORROSION/IRRITATION - Category 1B

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

SKIN SENSITIZATION - CATEGORY 1

GERM CELL MUTAGENICITY-CATEGORY 2

TOXIC TO REPRODUCTION - CATEGORY 2

SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE - (NARCOTIC EFFECTS) - CATEGORY 3

SPECIFIC TARGET ORGAN TOXICITY-REPEAT EXPOSURE -CATEGORY 2

REPRODUCTIVE TOXICITY, EFFECTS ON OR VIA LACTATION

AQUATIC (CHRONIC) - CATEGORY 4

**GHS LABEL REQUIREMENTS:**

**HAZARD PICTOGRAMS:**



**SIGNAL WORD : DANGER**

**HAZARD STATEMENTS:**

HIGHLY FLAMMABLE LIQUID AND VAPOR - H225

MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS - H304

HARMFUL IF SWALLOWED - H302

HARMFUL IF INHALED - H332

SUSPECTED OF CAUSING CANCER - H351

CAUSES SEVERE SKIN BURNS AND EYE DAMAGE - H314

MAY CAUSE AN ALLERGIC SKIN REACTION - H317

SUSPECTED OF CAUSING GENETIC DEFECTS - H341

SUSPECTED OF DAMAGING FERTILITY. SUSPECTED OF DAMAGING THE UNBORN CHILD - H361fd

MAY CAUSE DROWSINESS OR DIZZINESS - H336

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE - H373

MAY CAUSE HARM TO BREAST-FED CHILDREN - H362

MAY CAUSE LONG LASTING HARMFUL EFFECTS TO AQUATIC LIFE - H413

**In the event of sanding, grinding, or abrading:**

H372 Causes damage to organs through prolonged or repeated exposure.

**Hazards Not Otherwise Classified (HNOC):**

Sanding and grinding dust may be harmful if inhaled. Sanding and grinding dust may form combustible concentrations in air. Emits toxic fumes when heated.

**GENERAL PRECAUTIONARY STATEMENTS:**

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.

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.

## PRECAUTIONARY STATEMENTS:

- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- 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 precautionary measures against static discharge.
- P260: Do not breathe dust / fumes / gas / mist / vapors / spray.
- P261: Avoid breathing dust / fumes / gas / mist / vapors / spray.
- P263: Avoid contact during pregnancy / while nursing.
- P264: Wash thoroughly after handling.
- P270: Do not eat, drink, or smoke when using this product.
- P271: Use only outdoors or in a well - ventilated area.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P273: Avoid release to the environment.
- P280: Wear protective gloves / protective clothing / eye protection / face protection.
- P281: Use personal protection equipment as required.
- P301+310: IF SWALLOWED: Immediately call a POISON CENTER / doctor / ...
- P301+312: IF SWALLOWED: Call a POISON CENTER / doctor / .../ if you feel unwell.
- P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+352: IF ON SKIN: Wash with plenty of water / ...
- P303+361+353: IF ON SKIN ( or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
- P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+351+338: IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses if present and easy to do-continue rinsing
- P308+313: If exposed: Call a POISON CENTER or doctor / physician.
- P310: Immediately call a POISON CENTER / doctor/...
- P312: Call a POISON CENTER / doctor /... / if you feel unwell.
- P314: Get medical advise / attention if you feel unwell.
- P321: Specific treatment...See Label Information
- P330: Rinse mouth
- P331: Do NOT induce vomiting.
- P333+313: If skin irritation or a rash occurs: Get medical advice / attention.
- P363: Wash contaminated clothing before reuse.
- P370+378: In case of fire: Use ... to extinguish.
- P403+233: Store in a well ventilated place. Keep container tightly closed.
- P403+235: Store in a well ventilated place. Keep cool.
- P405: Store locked up.
- P501: Dispose of contents / containers in accordance with local / regional / national / international regulations

## SUPPLEMENTAL LABEL ELEMENTS:

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of concentrations above recommended limits causes headaches, drowsiness and nausea and could lead to unconsciousness or possibly death.

Irritating to the mucous membranes and may cause the skin to become sensitized.

Avoid any contact with skin or clothing and wash thoroughly after handling.

Emits toxic fumes when heated.

## HAZARDS NOT OTHERWISE CLASSIFIED:

Prolonged or repeated exposure may dry skin and / or cause skin irritation.

Sanding and grinding dust may be harmful if inhaled. Sanding and grinding dust may form combustible concentrations in air.

## In the event of sanding, grinding, or abrading:

H372 Causes damage to organs through prolonged or repeated exposure.

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.

---

---

**Section -3. COMPOSITION / INFORMATION ON INGREDIENTS**

---

---

**Chemical family** : Mixture of organic compounds

For the hazards of the composition, (SDS see Section 2).

---

| <b>% BY WEIGHT IN PRODUCT-</b>   | <b>HAZARDOUS INGREDIENT</b>                       | <b>CAS#-</b>             |
|--|---|--------------------------|
| <20%   | Glycol Ether EB                                   | 111-76-2                 |
| Combustible Liquid   |   |                          |
| Causes Skin Irritation   |   |                          |
| Causes Eye Irritation  |   |                          |
| May Cause Respiratory Irritation   |   |                          |
| <b>fatty Acids, C18-unsatd., Dimers, Oligomeric Reaction Products with Tall-Oil Fatty Acids and Triethylenetetramine</b> |   |                          |
| <50%   |   | 68082-29-1 /<br>112-24-3 |
| Skin Corrosion / Irritation (Category 2)   |   |                          |
| Serious Eye Damage / Eye Irritation (Category 1)   |   |                          |
| Skin Sensitization (Category 1A)   |   |                          |
| Aquatic Hazard (Acute) - (Category 2)  |   |                          |
| Aquatic Hazard (Long Term) - (Category 2)  |   |                          |
|  | <b>1,2-ETHANEDIAMINE N1,N2-BIS (2-AMINOETHYL)</b> |                          |
| <40%   |   | <b>90640-67-8</b>        |
| Skin Corrosion / Irritation (Category 1B)  |   |                          |
| Serious Eye Damage / Eye Irritation (Category 1)   |   |                          |
| Skin Sensitization (Category 1A)   |   |                          |
| Aquatic Hazard (Acute) - (Category 2)  |   |                          |
| Aquatic Hazard (Long Term) - (Category 2)  |   |                          |
|  | <b>2-PROPANOL</b>                                 |                          |
| <10%   |   | 67-63-0                  |
| OSHA HAZARDS: FLAMMABLE LIQUIDS,TARGET ORGAN EFFECT,IRRITANT   |   |                          |
| OTHER HAZARDS THAT DO NOT RESULT IN CLASSIFICATION: MAY FORM EXPLOSIVE PEROXIDES   |   |                          |
| GHS CLASSIFICATION: 2-PROPANOL   |   |                          |
| FLAMMABLE LIQUIDS (CATEGORY2)  |   |                          |
| SKIN IRRITATION (CATEGORY3)  |   |                          |
| EYE IRRITATION (CATEGORY 2A)   |   |                          |
| SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE (CATEGORY3)   |   |                          |
| ACUTE TOXICITY ORAL (CATEGORY 5)   |   |                          |
|  | <b>Butanol</b>                                    |                          |
| <20%   |   | 71-36-3                  |
| HARMFUL IF SWALLOWED - H302  |   |                          |
| CAUSES SKIN IRRITATION - H315  |   |                          |
| FLAMMABLE LIQUID AND VAPOR - H226  |   |                          |
| MAY CAUSE RESPIRATORY IRRITATION - H335  |   |                          |
| MAY CAUSE DROWSINESS OR DIZZINESS - H336   |   |                          |
| CAUSES SERIOUS EYE DAMAGE - H318   |   |                          |

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling,storage, use and disposal are beyond our control and may be beyond our knowledge.

&lt;5%

OSHA HAZARDS: Skin Sensitiser,Irritant

GHS CLASSIFICATION: EPOXY RESIN

SKIN IRRITATION (CATEGORY 2)

EYE IRRITATION (CATEGORY 2A)

SKIN SENSITIZATION (CATEGORY 1)

ACUTE AQUATIC TOXICITY (CATEGORY 2)

CHRONIC AQUATIC TOXICITY (CATEGORY 2)

**Section -4. FIRST-AID MEASURES**

**General:** When in doubt or symptoms persist, seek medical attention. Have Safety Data Sheet information available. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air, if breathing has stopped, administer artificial respiration. Give nothing by mouth, seek immediate medical attention.

**Eye contact:** Check for and remove any contact lenses. Irrigate with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek immediate medical attention.

**Skin contact:** Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognized skin cleaners. Do NOT use aromatic solvents, thinners or petroleum products.

**Ingestion:** If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

May be fatal if swallowed or vomited and enters lungs and/or airways. Never give anything by mouth to an unconscious person.

**Section -5. FIRE-FIGHTING MEASURES****Extinguishing agents**

**Recommended:** Universal resistant foam, CO<sub>2</sub>, water, powder.

**Agents to avoid:** None known

**Attention**

Promptly remove all persons in the event of a fire from the fire area. If safe to do so, remove all containers from fire area as well.

Fire will produce dense black smoke. Exposure to decomposition products may cause a Health Hazard. Fire fighters should wear self-contained breathing apparatus.

Water mist may be used to cool closed containers to prevent pressure build-up and possible auto-ignition and explosion when exposed to extreme heat.

Do not weld, flame cut or expose to extreme heat or ignition sources, empty containers which have contained flammable products.

Do not allow run-off from fire fighting to enter drains or water courses.

Emits toxic fumes when heated.

**HAZARDOUS DECOMPOSITION PRODUCTS INCLUDE BUT MAY NOT BE LIMITED TO THE FOLLOWING:**

- Carbon Dioxide
- Carbon Monoxide
- Carbon Oxides
- Halogenated Compounds
- Airborn Solids and Liquid Particulates
- Nitrogen Oxides
- Nitrogen Oxides can react with water vapors to form corrosive nitric acid
- Calcium Oxides
- Unidentified Organic and Inorganic Compounds
- Toxic Fumes
- Smoke
- Phenolic Compounds
- Sulfur Oxides
- Other Hazardous Materials

In case of inhalation of decomposition products released in a fire, symptoms may be delayed. Exposed persons may need to be kept under medical surveillance for at least 48 hours.

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling,storage, use and disposal are beyond our control and may be beyond our knowledge.

---

---

**Section -6. ACCIDENTAL RELEASE MEASURES**

---

---

Eliminate sources of ignition, ventilate the area. Avoid breathing vapors by using appropriate respiratory protective equipment. Refer to protective measures listed in sections 7 & 8.

Collect spill with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with local regulations (see section 13). Do not allow to enter drains or watercourses.

Clean-up with a detergent/ water mix ; avoid use of aromatic solvents. If the product enters drains or watercourses, inform authority with jurisdiction in accordance with state / local regulations.

Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

---

---

**Section -7. HANDLING AND STORAGE**

---

---

**7.1 Handling:**

No smoking, eating and drinking during handling.

Avoid exposure during pregnancy/while nursing.

Keep containers tightly closed. Prior to movement containers which are opened should be carefully resealed.

Avoid skin and eye contact. Avoid inhalation in case of exposure to vapor and spray mist.

Handle and open containers with care to avoid spilling of contents. Never use pressure to empty; container is not a pressure vessel. Clean or discard contaminated clothing and shoes.

Preparation may charge electrostatically; always use grounding/ bonding/ earthing leads when transferring contents of containers. Operators should wear antistatic footwear and clothing, and floors should be electrically conductive.

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapor in air, and avoid vapor concentration higher than the Occupational Exposure Limits.

Use in areas from which local sources of ignition have been excluded. Electrical equipment including lighting should be protected to the appropriate standard. Isolate from sources of heat, sparks and open flame. Non-sparking tools are recommended.

---

---

**7.2 Storage:**

Observe label precautions. Store between 32/F and 95/F ( 0/C and 35/C ) in a dry, clean and well ventilated place, away from sources of heat, ignition, and direct sunlight. For flash points below 23 °C store in an area constructed to the appropriate standard

---

---

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

---

---

**8.1 Engineering measures:**

Avoid the inhalation of vapors, spray mist and particulates. Achieve by local exhaust ventilation providing good general extraction as to keep air-borne concentration below the Occupational Exposure Limits (OEL).

If local / area ventilation is not sufficient to comply with OEL, suitable (NIOSH) respiratory protection to be provided. Always provide suitable (NIOSH) respiratory protection when sanding, grinding or otherwise abrading cured material.

---

---

---

**8.2 Exposure limits**

---

**Work place exposure limits ( 8 hour )**

---

| OSHA                                    | PRODUCT           | ACGIH   |
|---|-------------------|---------|
| 25 ppm                                  | Glycol Ether EB   | 20 ppm  |
| 400 ppm                                 | 2-PROPANOL        | 200 ppm |
| 50 ppm                                  | Butanol           | 20 ppm  |
| 15 mg/m <sup>3</sup> Total Dust         | Calcium Carbonate | -       |
| 5 mg/m <sup>3</sup> Respirable Fraction |                   | -       |

**8.3 Personal protection**

All Personal Protective Equipment, including Respiratory Protection, used to control exposure to hazardous substances must be selected to meet the requirements of OSHA Regulations.

**Respiratory protection :**

Appropriate respiratory protection equipment should be selected according to the type of contaminants, following regulatory (OSHA / NIOSH) and manufacturers instructions including proper fitting of devices.

**Hand protection :**

For prolonged or repeated contact, recommend gloves type: polyvinyl alcohol, nitrile rubber, latex rubber (some people may exhibit sensitivity to Latex). Barrier creams may help to protect exposed areas of the skin. However, they should not be applied post exposure.

**Eye protection :**

Use safety glasses with side shields to protect against splashes. Face shields may also be worn.

**Skin protection :**

Protective clothing made of antistatic and fire resistant fibers. All parts of the body should be washed after contact. Use good hygiene and industrial practices, keep working clothes clean.

---

**9. PHYSICAL AND CHEMICAL PROPERTIES**

---

- Physical state at: 68 ° F (20 ° C) Liquid
- Flash point: 5 ° C-----40 ° F Method: TCC
- Specific gravity at: 68 ° F (20 ° C) n/a
- Vapor Density: N/A
- Lower Explosive Limit (% vol.): N/A
- Upper Explosive Limit (% vol.): N/A
- Miscibility in water at 20 ° C: SLIGHT
- VOC : N/A
- Ph : N/A
- % Volatile by Volume: N/A
- Vapor pressure at: 68 ° F (20 ° C) N/A
- Color: HAZE GREY OR FOREST GREEN
- Appearance: liquid
- Odor: ALCOHOL ODOR
- Boiling Point: N/A
- Material Supports Combustion : Yes

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.

**10. STABILITY AND REACTIVITY**

Stable under recommended storage and handling conditions (see SDS section 7). In case of combustion, may produce hazardous decomposition products such as :

HAZARDOUS DECOMPOSITION PRODUCTS INCLUDE BUT MAY NOT BE LIMITED TO THE FOLLOWING:

- Carbon Dioxide
- Carbon Monoxide
- Carbon Oxides
- Halogenated Compounds
- Airborn Solids and Liquid Particulates
- Nitrogen Oxides
- Nitrogen Oxides can react with water vapors to form corrosive nitric acid
- Calcium Oxides
- Unidentified Organic and Inorganic Compounds
- Toxic Fumes
- Smoke
- Phenolic Compounds
- Sulfur Oxides
- Other Hazardous Materials

In case of inhalation of decomposition products released in a fire, symptoms may be delayed. Exposed persons may need to be kept under medical surveillance for at least 48 hours.

**11. TOXICOLOGICAL INFORMATION**

There are no data available on the preparation itself. See (SDS Sections 3 and 15) for details.

Exposure to component solvents vapors at concentrations in excess of the stated Occupational Exposure Limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms and signs of overexposure include headache, dizziness, fatigue, muscular weakness, drowsiness, reduced fetal weight, increase in fetal deaths, skeletal malformations, and in extreme cases loss of consciousness

Repeated or prolonged contact with the preparation may cause Defatting of the skin resulting in non-allergic dermatitis and absorption through the skin.

The liquid splashed in the eyes causes serious eye irritation and damage.

Irritating to mouth, throat and stomach. Ingestion causes reduced fetal weight, increased fetal deaths and skeletal malformations

**ACUTE TOXICITY:**

| ENDPOINT   | SPECIES    | PRODUCT | DOSE         | EXPOSURE |
|--|------------|---------|--------------|----------|
| <b>fatty Acids, C18-unsatd., Dimers, Oligomeric Reaction Products with Tall-Oil Fatty Acids and Triethylenetetramine</b> |            |         |              |          |
| LD50 ORAL  | Rat        |         | 1761.2 mg/kg | -        |
| <b>2-PROPANOL</b>  |            |         |              |          |
| LD50 Oral  | <b>Rat</b> |         | 4710 mg/kg   | -        |
| LD50 Oral  | Mouse      |         | 3600 mg/kg   | -        |
| LD50 Dermal  | Rabbit     |         | 12870 mg/kg  | -        |
| <b>Butanol</b>   |            |         |              |          |
| LD50 ORAL  | Rat        |         | 700 mg/kg    | -        |
| LD50 ORAL  | Rat        |         | 790 mg/kg    | -        |
| LD50 Dermal  | Rabbit     |         | 3400 mg/kg   | -        |
| LD50 Dermal  | Rabbit     |         | 3402 mg/kg   | -        |
| <b>BISPHENOL-A-EPOXY RESIN</b>   |            |         |              |          |
| LD50 DERMAL  | Rabbit     |         | >2 g/kg      | -        |
| LD50 ORAL  | Rat        |         | 11.4 g/kg    | -        |

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.



## **CORROSION / IRRITATION**

### **PRODUCT**

2-propanal Causes mild skin irritation  
Causes serious eye irritation

BISPHENOL-A-EPOXY RESIN Skin - Mild Irritant  
Eyes - Causes serious eye irritation

### **1,2-ETHANEDIAMINE N1,N2-BIS (2-AMINOETHYL)**

Causes severe skin burns and eye damage

### **Sensitizer:**

**fatty Acids, C18-unsatd., Dimers, Oligomeric Reaction Products with Tall-Oil Fatty Acids and Triethylenetetramine**  
- Causes Sensitization

### **1,2-ETHANEDIAMINE N1,N2-BIS (2-AMINOETHYL)**

Causes Skin Sensitization

**BISPHENOL-A-EPOXY RESIN** May cause an allergic skin reaction

### **SPECIFIC TARGET ORGAN TOXICITY-STOT (SINGLE EXPOSURE)**

2-PROPANOL May Cause Drowsiness or dizziness

**TARGET ORGANS:** BRAIN, BLOOD, KIDNEYS, LUNGS, REPRODUCTIVE SYSTEM, LIVER, HEART, PERIPHERAL NERVOUS SYSTEM, GASTROINTESTINAL TRACT, UPPER RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, NERVOUS SYSTEM, EYE, LENS AND/OR CORNEA

MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS - H304

HARMFUL IF SWALLOWED - H302

HARMFUL IF INHALED - H332

SUSPECTED OF CAUSING CANCER - H351

CAUSES SEVERE SKIN BURNS AND EYE DAMAGE - H314

MAY CAUSE AN ALLERGIC SKIN REACTION - H317

SUSPECTED OF CAUSING GENETIC DEFECTS - H341

SUSPECTED OF DAMAGING FERTILITY. SUSPECTED OF DAMAGING THE UNBORN CHILD - H361fd

MAY CAUSE DROWSINESS OR DIZZINESS - H336

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE - H373

MAY CAUSE HARM TO BREAST-FED CHILDREN - H362

### **ASPIRATION HAZARD :**

MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.

---

---

**12. ECOLOGICAL INFORMATION**

---

---

There is no data available on the preparation itself. Do not allow the product to enter drains or water ways. See (SDS Sections 3 and 15)

Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

**Toxicity :**

---

| RESULT                     | PRODUCT SPECIES                | EXPOSURE        |
|----------------------------|--------------------------------|-----------------|
|                            | <b>Glycol Ether EB</b>         |                 |
| LC50 1575 mg/l             | Carp                           | 48 Hours        |
| LC50 1720 mg/l             | Daphnia Magna                  | 24 Hours        |
|                            | <b>Triethylenetetramine</b>    |                 |
| LC50 Static 330mg/l        | Pimephales Promelas            | 96 Hours        |
| EC50 31.1 mg/l             | Daphnia Magna                  | 48 Hours        |
| ErC50 20 mg/l              | Algae                          | 72 Hours        |
| EC10 1.9 mg/l              | Daphnia Magna                  | 21 Days         |
| EC50 Static 800mg/l        | Bacteria                       | 0.5 HOURS       |
|                            | <b>BUTANOL</b>                 |                 |
| EC50 500 mg/L              | Desmodesmus Subspicatus        | 96 Hours        |
| EC50 500 mg/L              | Desmodesmus Subspicatus        | 72 Hours        |
| EC50 1983 mg/L             | Daphnia Magna                  | 48 Hours        |
| EC50 Static 1897-2072 mg/L | Daphnia Magna                  | 48 Hours        |
|                            | <b>BISPHENOL-A-EPOXY RESIN</b> |                 |
| EC50 9.4 mg/L              | Algae                          | 72 Hours Static |
| EC50 1.7 mg/L              | Daphnia Magna                  | 48 Hours Static |
| IC50 >100 mg/L             | Bacteria                       | 3 Hours Static  |
| LC50 1.5 mg/L              | Fish                           | 96 Hours        |

**PERSISTANCE AND DEGRADABILITY:**

| TEST | PRODUCT PERIOD                 | RESULT |
|------|--------------------------------|--------|
|      | <b>Triethylenetetramine</b>    |        |
| 301D | 162 Days                       | 0%     |
|      | <b>BISPHENOL-A-EPOXY RESIN</b> |        |
| 301F | 28 Days                        | 5%     |

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.

| AQUATIC HALF LIFE     | PRODUCT<br>PHOTOLYSIS          | BIODEGRADABILITY |
|-----------------------|--------------------------------|------------------|
|                       | <b>BISPHENOL-A-EPOXY RESIN</b> |                  |
| Fresh Water 4.83 Days | -                              | Not Readily      |
| Fresh Water 3.58 Days | -                              | Not Readily      |
| Fresh Water 7.1 Days  | -                              | Not Readily      |

**Bioaccumulative Potential :**

| Product / Ingredient    | LogP(ow)                      | BCF | Potential |
|-------------------------|-------------------------------|-----|-----------|
| Triethylenetetramine    | -2.65                         |     |           |
| Butanol                 | Partition Coefficient - 0.785 |     |           |
| BISPHENOL-A-EPOXY RESIN | 3.8                           | -   | low       |
| BISPHENOL-A-EPOXY RESIN | 3.242                         | 31  | low       |

**Mobility in Soil :** Not Available

**13. DISPOSAL CONSIDERATIONS**

Recommended incineration or land fill as hazardous waste per Federal, State and local regulations.  
 React with curing agent and dispose of as hazardous waste per Federal, State and local regulations. Recommended incineration or land fill.  
 Empty containers and/or liners may contain material residue. Empty contaminated packagings thoroughly. Dispose in accordance with all Federal, State, and local health and environmental regulations.  
 Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

**14. TRANSPORT INFORMATION**

**DOT: § 172.101 HAZARDOUS MATERIALS TABLE**

**UN Number: 1263**

**Proper Shipping Name: Paint Related Material**

**Labels: Flammable Liquid**

**IATA:**

UN Number: 1263

Proper Shipping Name: Paint Related Material

Labels: Flammable Liquid

Hazard Class: 3 Subclass: NO

Packaging Group: II

Passenger Air Packing Instruction : 355

Passenger aircraft: 60 Liter (16 gallon)

Cargo Air Packing Instruction : 366

Cargo aircraft only: 220 Liter (58 gallon)

Hazard Class: 3 Subclass: NO

Packaging Group: II

Limited Quantity: Passenger aircraft: 10 Liter (2.64 Gallons)

Cargo aircraft only: 220 Liter (58 gallon)

Vessel stowage: A

ERG: 128

NMFC 4620 sub.5-CL.60

Schedule B # 3506.91.0000

**IMDG:**

UN Number: 1263

Proper Shipping Name: Paint Related Material

Label: 3

Hazard Class: 3 Subclass: NO

Packaging Group: II

EMS No: F, E – S, D

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.

---

---

**15. REGULATORY INFORMATION**

---

---

**US Regulations Federal**

| chemical (s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 (SARA) | Chemical Name     | CAS No  | Weight % | Threshold limit (Reporting Value) |
|---|-------------------|---------|----------|-----------------------------------|
|   |                   |         |          |                                   |
|   | <b>2-Propanal</b> | 67-63-0 | <10%     | unknown                           |
|   | BUTANOL           | 71-36-3 | <20%     | unknown                           |

SARA notifications must remain attached to this SDS. Any copies and /or distribution of this SDS must include all SARA notifications.

All remaining Constituents are non-hazardous per FED-STD-313 All Constituents are listed in TSCA inventory; complete mixture is excluded Per TSCA Par. 710.4 (d) 95 (6) (7) Constituents are not listed in TSCA 12b CORR. LIST

**United States:** Sara 302/304 (Sara 304 RQ): Not Applicable

Information On Ingredients: None Were Found

**Sara 311/312**

**Classification: Fire Hazard, Immediate (acute) Health Hazard, Delayed (chronic) Health Hazard**

**US Regulations State**

|                          |                      |              |                 |
|--------------------------|----------------------|--------------|-----------------|
| <b>Glycol Ether EB</b>   | <b>New Jersey</b>    | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Massachusetts</b> | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Pennsylvania</b>  | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Rhode Island</b>  | <b>(RTK)</b> | <b>- Listed</b> |
| <b>2-propanal</b>        | <b>New Jersey</b>    | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Massachusetts</b> | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Pennsylvania</b>  | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Rhode Island</b>  | <b>(RTK)</b> | <b>- Listed</b> |
| <b>Calcium Carbonate</b> | <b>New Jersey</b>    | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Massachusetts</b> | <b>(RTK)</b> | <b>- Listed</b> |
| <b>BUTANOL</b>           | <b>New Jersey</b>    | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Massachusetts</b> | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Pennsylvania</b>  | <b>(RTK)</b> | <b>- Listed</b> |
|                          | <b>Rhode Island</b>  | <b>(RTK)</b> | <b>- Listed</b> |

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.

**California Prop. 65 : Warning**

This product contains a chemical or chemicals known by the state of California to cause cancer, birth defects, or other reproductive harm.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

Listed National Pollutant Release Inventory (NPRI):

- fatty Acids, C18-unsatd., Dimers, Oligomeric Reaction Products with Tall-Oil Fatty Acids and Triethylenetetramine
- Glycol Ether EB
- 2-Propanol Cas# 67-63-0
- BUTANOL Cas# 71-36-3

---

---

**16. OTHER INFORMATION**

---

---

|              |   |
|--------------|---|
| HEALTH       | 3 |
| FLAMMABILITY | 3 |
| REACTIVITY   | 0 |

|              |   |
|--------------|---|
| HEALTH       | 3 |
| FLAMMABILITY | 3 |
| REACTIVITY   | 0 |

Customer and / or end user is responsible for determining PPE

**NFPA**

**HMIS**

Preparer:

Flamemaster / Compliance

Revision Date: 07/22/2020

Containers:

plastic jars, metal cans  
cartridge kits

Limited Quantity

See SDS Section 14

Maximum container size 50 Gallons / 190 Liters

**Notice to reader:**

This SDS is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.

In all cases, the user must determine the applicability of all information and recommendations contained herein as well as the suitability of this product for their own particular needs or purposes.

This product may be hazardous and should always be used with care and discretion. Every effort has been made to describe all known hazards, but this in no way guarantees the above mentioned hazards are the only hazards present.

Flamemaster Corporation, its Affiliates and its Agents, shall in no way be held liable for any damages resulting from handling, using, storing, disposing of, or from contact with this product. User assumes all risk.

**End of Safety Data Sheet**