

Material Safety Data Sheet

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For updates please download from www.mgchemicals.com or fax requests to 1-800-708-9888

Section 1: Product Identification

MSDS Code: 833FRB - Part A

Name: Epoxy - Flame Retardant

Related Part Numbers: 833FRB-375ML; 833FRB-3L; 833FRB-60L

Use: Encapsulating and potting compound.

Section 2: Hazardous Ingredients

| CAS# | Chemical Name | Percentage by weight | ACGIH TWA | Osha Pel | Osha Stel |
|------------|---|----------------------|-----------|----------|-----------|
| 28064-14-4 | Reaction product of epichlorohydrin and Bisphenol F | 64 - 70% | N/e | N/e | N/e |
| 84852-53-9 | 1,1-(ethane-1,2-diyl)bis(pentabromobenzene | 14 - 17% | N/e | N/e | N/e |
| 1309-64-4 | Antimony trioxide | 5 - 6% | N/E | N/E | N/E |
| 68609-97-2 | Alkyl Glycidyl ether | 8 - 10% | N/A | N/A | N/A |
| 64741-65-7 | Naphtha petroleum | < 1% | N/A | N/A | N/A |
| 1333-86-4 | Carbon black | < 1% | 3.5 mg/m3 | N/E | N/E |
| 67762-90-7 | Siloxanes and silicones reaction with Silica | < 1% | 10 ppm | N/A | N/A |

Section 3: Hazards Identification

- Eyes:** Causes irritation.
- Skin:** Prolonged exposure may cause skin irritation. May cause allergic reaction in some individuals.
- Inhalation:** At room temperature, exposure to vapors is unlikely due to physical properties. Higher temperatures may generate vapor levels sufficient to cause irritation.
- Ingestion:** Single dose oral toxicity is low. Amounts ingested incidental to industrial handling are not likely to cause injury; however, ingestion of large amounts may cause injury.
- Chronic:** Prolonged or repeated exposure may cause respiratory sensitization, an allergic reaction that becomes evident on re-exposure to this material.

Section 4: First Aid Measure

- Eyes:** Remove contact lenses. Flush with water or saline for 20 minutes. Get medical aid if symptoms persist.
- Skin:** Wash skin with soap and water. Get medical aid if symptoms persist.
- Inhalation:** Immediately remove from exposure to fresh air. Get medical aid if symptoms persist.
- Ingestion:** Do not induce vomiting. If conscious, give 1-2 glasses of water or milk. Get medical aid.

Section 5: Fire Fighting Measures

- Autoignition Temperature:** N/e
- Flash Point:** 190°C
- LEL / UEL:** N/e
- Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.
- General Information:** Product will burn if exposed to open flames, but will self extinguish as soon as the flame is removed.

Section 6: Accidental Release Measures

Spill Procedure: Remove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection. Sprinkle absorbent compound onto spill, then sweep into a plastic or metal container. Wipe up further residue with paper towel and place in container. Wash spill area with soap and water.

Section 7: Handling and Storage

Handling: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Do not expose container to heat or flame.

Storage: Keep away from sources of ignition. Store in a cool, dry, well-ventilated area, away from incompatible substances.

Section 8: Exposure Controls

Routes of entry: Eyes, ingestion, inhalation, and skin.

Ventilation: Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.

Personal Protection: Wear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protective clothing to prevent skin contact. Use a NIOSH approved respirator when necessary.

Section 9: Physical and Chemical Properties

| | | | | | |
|------------------------|--------|-----------------------------------|----------------------------|------------------------------|----------------|
| Physical State: | Liquid | Odor: Mild | Solubility: None | Evaporation Rate: N/e | |
| Boiling Point: | N/A | Specific Gravity: 1.34 g/L | Vapor Pressure: N/e | Vapor Density: N/e | pH: N/a |

Section 10: Stability and Reactivity

Stability: Stable at normal temperatures and pressures.

Conditions to avoid: Contamination by those material referred to under incompatibleness.

Incompatibilities: Oxidizing agents, acids, and bases.

Polymerization: Will not occur under normal processing.

Decomposition: Carbon dioxide, carbon monoxide, hydrogen bromide and bromine.

Section 11: Toxicological Information

Sensitization: (effects of repeated exposure) May be a skin sensitizer.

Carcinogenicity: (risk of cancer) No

Teratogenicity: (risk of malformation in an unborn fetus) No

Reproductive Toxicity: (risk of sterility) No

Mutagenicity: (risk of heritable genetic effects) No

| Lethal Exposure Concentrations: | Ingestion (LD50): | Inhalation (LC50): | Skin (LD50): | Inhalation (TCLo): |
|--|--------------------------|---------------------------|---------------------|---------------------------|
| Reaction product of epichlorohydrin and Biphenyl F | N/A | N/A | N/A | N/A |
| 1,1-(ethane-1,2-diyl)bis(pentabromobenzene | N/A | N/A | N/A | N/A |
| Antimony trioxide | N/A | N/A | N/A | N/A |
| Alkyl Glycidyl ether | 17100 mg/kg Rat | N/A | N/A | N/A |
| Naphtha petroleum | | | | |
| Carbon black | >15400 mg/kg Rat | N/A | >3 gm/kg Rabbit | |
| Siloxanes and silicones reaction with | N/A | N/A | N/A | 30 mg/kg/6H/4W |

Silica

Rat

Section 12: Ecological Information

General Information: Avoid runoff into storms and sewers, which lead into waterways. Water runoff can cause environmental damage.

Volatile Organic compounds, % by weight: 4.0%

Volatile Organic compounds, grams per litre: 50.8 g/L

Section 13: Disposal Information

General Information: Dispose of in accordance with all local, provincial, state, and federal regulations. Water runoff can cause environmental damage.

Section 14: Transportation Information

Ground:

Not-regulated

Air:

Not-regulated

Sea:

Not-regulated

Section 15: Regulatory Information

CANADA

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations. DSL

All ingredients in this product are listed on the Domestic Substances List

WHMIS

This product belongs to the following categories: **D2B**

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling Regulations.

USA

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain any chemicals listed as hazardous air pollutants.

SARA (Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)

This product contains a toxic chemical which has a reportable quantity. (Antimony trioxide CAS# 1309644, 5%)

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product does contain Antimony trioxide CAS# 1309644 5%, a toxic chemical subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

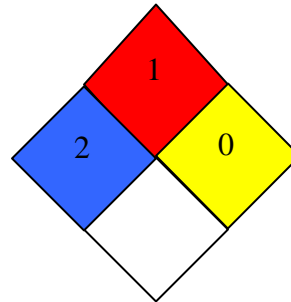
California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, May 1, 1997 revision, USA)

This product contains chemicals known to the state of California to cause reproductive toxicity.

HMIS RATING

| | |
|-----------------------------|---|
| HEALTH: | 2 |
| FLAMMABILITY: | 1 |
| PHYSICAL HAZARD: | 0 |
| PERSONAL PROTECTION: | |

NFPA CODES



EUROPE

RoHS

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

Definitions: N/A = not applicable, N/E = not established

Disclaimer: This material safety data sheet is provided as an information resource only. M.G. Chemicals believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to verify its validity. The buyer assumes all responsibility of using and handling the product in accordance with federal, state, and local regulations.