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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Fast Cure Epoxy
Product type: Epoxy Hardener
Company address: Henkel Corporation
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067

Item number: 21425_HARDENER
Region: United States
Contact information:
Telephone: 860.571.5100
Emergency telephone: 860.571.5100
Internet: www.loctite.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Hazardous components</u> | <u>%</u> | <u>ACGIH TLV</u> | <u>OSHA PEL</u> | <u>OTHER</u> |
|--|----------|-------------------------------|--------------------------------|---|
| Alumina trihydrate 21645-51-2 | 30-60 | None | None | None |
| Polymercaptan hardener | 30-60 | None | None | None |
| Phenol, 2,4,6- tris[(dimethylamino)methyl] 90-72-2 | 5-10 | None | None | None |
| Aromatic plasticizer 64741-81-7 | 5-10 | None | None | None |
| Styrene monomer 100-42-5 | 1-5 | 20 ppm TWA 40 ppm STEL | 100 ppm TWA 200 ppm Ceiling | None |
| Silica, amorphous, fumed, crystalline-free 112945-52-5 | 1-5 | 6 mg/m ³ TWA | 10 mg/m ³ TWA | 3 mg/m ³ TWA respirable dust |
| Ethylene glycol 107-21-1 | 1-5 | 100 mg/m ³ Ceiling | None | None |
| Benz{a}anthracene 56-55-3 | 0.1-1 | None | None | None |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

| | | |
|------------------------------|-----------------------------|---------------|
| Physical state: Paste | HEALTH: | 2 |
| Color: Black | FLAMMABILITY: | 1 |
| Odor: Mercaptan | PHYSICAL HAZARD: | 1 |
| | Personal Protection: | See Section 8 |

WARNING: CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Eye contact, Ingestion, Inhalation, Skin contact

Potential Health Effects

Item number: 21425_HARDENER

Product name: Fast Cure Epoxy

Inhalation: May cause respiratory tract irritation. May cause irritation to nose and throat. Vapors may cause headaches, nausea, dizziness and respiratory tract irritation. Shortness of breath.
Skin contact: Allergic skin reaction. Moderate skin irritation. Itching. Redness.
Eye contact: Moderate eye irritation. Redness. Tissue damage.
Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Nausea. Vomiting.

Existing conditions aggravated by exposure: Skin disorders. Skin allergies. Respiratory disorders. Eye disorders.

See Section 11 for additional toxicological information.

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If symptoms develop and persist, get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Keep individual calm. Get medical attention if symptoms develop and persist.

Notes to physician: None.

5. FIRE-FIGHTING MEASURES

Flash point: Greater than 93°C (200°F) Tagliabue closed cup

Autoignition temperature: Not available

Flammable/Explosive limits-lower %: Not available

Flammable/Explosive limits-upper %: Not available

Extinguishing media: Foam, dry chemical or carbon dioxide.

Special fire fighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Unusual fire or explosion hazards: Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

Hazardous combustion products: Oxides of carbon. Irritating organic fragments.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions: Prevent product from entering drains or open waters.

Clean-up methods: Remove all ignition sources. Immediately contact emergency personnel. Scrape up as much material as possible. Clean residue with soap and water. Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

| | |
|-------------------------------|--|
| Handling: | Keep away from heat, spark and flame. Do not breathe mist or vapors. Keep container closed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. |
| Storage: | Store in original container until ready to use. Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. |
| Incompatible products: | Refer to Section 10. |

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|--------------------------------|--|
| Engineering controls: | Use local exhaust ventilation to maintain airborne concentrations below established exposure limits. |
| Respiratory protection: | Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists. |
| Skin protection: | Chemical resistant, impermeable gloves. |
| Eye/face protection: | Chemical splash goggles or safety glasses with side shields. |

See Section 2 for exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| Physical state: | Paste |
| Color: | Black |
| Odor: | Mercaptan |
| Vapor pressure: | Nil |
| pH: | Not applicable |
| Boiling point/range: | Greater than 149°C (300°F) |
| Melting point/range: | Not available |
| Specific gravity: | 1.40 |
| Vapor density: | Not available |
| Evaporation rate: | Not available |
| Solubility in water: | Slightly soluble |
| Partition coefficient (n-octanol/water): | Not available |
| VOC content: | 14.3%; 200 grams/liter 0.038% (value for resin and hardener together) |

10. STABILITY AND REACTIVITY

| | |
|--|--|
| Stability: | Stable |
| Hazardous polymerization: | Will not occur. |
| Hazardous decomposition products: | None |
| Incompatibility: | Strong acids. Strong bases. Strong oxidizers. |
| Conditions to avoid: | Excessive heat. Storage with incompatible materials. |

11. TOXICOLOGICAL INFORMATION

Carcinogen Status

| Hazardous components | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen |
|--|--------------------|-----------------|-----------------|
| Alumina trihydrate 21645-51-2 | No | No | No |
| Polymercaptan hardener | No | No | No |
| Phenol, 2,4,6- tris[(dimethylamino)methyl] 90-72-2 | No | No | No |
| Aromatic plasticizer 64741-81-7 | No | No | No |
| Styrene monomer 100-42-5 | No | Group 2B | No |
| Silica, amorphous, fumed, crystalline-free 112945-52-5 | No | No | No |
| Ethylene glycol 107-21-1 | No | No | No |
| Benz(a)anthracene 56-55-3 | Suspect Carcinogen | Group 2A | No |

Literature Referenced Target Organ & Other Health Effects

| Hazardous components | Health Effects/Target Organs |
|--|---|
| Alumina trihydrate 21645-51-2 | Irritant, Lung, Respiratory |
| Polymercaptan hardener | No data |
| Phenol, 2,4,6- tris[(dimethylamino)methyl] 90-72-2 | Allergen, Irritant |
| Aromatic plasticizer 64741-81-7 | No Target Organs |
| Styrene monomer 100-42-5 | Blood, Ear, Eyes, Irritant, Liver, Mutagen, Nervous System, Some evidence of carcinogenicity |
| Silica, amorphous, fumed, crystalline-free 112945-52-5 | Nuisance dust |
| Ethylene glycol 107-21-1 | Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic |
| Benz(a)anthracene 56-55-3 | Blood, Immune system, Irritant, Liver, Mutagen, Respiratory, Skin, Some evidence of carcinogenicity |

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose according to EPA and local governmental regulations.

EPA hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The shipping classifications in this section are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

U.S. Department of Transportation Ground (49 CFR):

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA):

Proper shipping name: Not regulated
Hazard class or division: None

Item number: 21425_HARDENER

Product name: Fast Cure Epoxy

Identification number: None
Packing group: None

WaterTransportation (IMO/IMDG):

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None
Marine pollutant: None known

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification: None.

CERCLA/SARA Section 302 EHS: None above reporting de minimus.
CERCLA/SARA Section 311/312: Immediate Health Hazard
CERCLA/SARA 313: Ethylene glycol (CAS# 107-21-1) . Styrene monomer (CAS# 100-42-5) .

California Proposition 65: This product contains a chemical known to the State of California to cause cancer. 1,4-Dioxane (CAS# 123-91-1). Acetaldehyde (CAS# 75-07-0). Ethylene oxide (CAS# 75-21-8). Benz{a}anthracene (56-55-3). Formaldehyde (CAS# 50-00-0). Benzene (CAS# 71-43-2).

Canada Regulatory Information

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances list.
WHMIS hazard class: D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: Revised to new format.

Prepared by: Gary Pierson, Health and Regulatory Affairs Specialist

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