

Date Printed: 11/8/2012

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Product Code: 16709CEH

Product Name: EPOXY HARDENER, MIL-PRF-23377K(2) TYPE I/II, CLASS C1,N

Hentzen Coatings, Inc., 6937 W. Mill Road, Milwaukee, WI 53218-1225

Chemtrec 24-hour Emergency Phone: 800-424-9300

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

(See top of page)

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Component/Exposure Limits | CAS# | % by Wt. |
|---|----------|----------|
| METHYL AMYL KETONE | 110-43-0 | 30-40% |
| ACGIH TLV/TWA - 50 PPM, 233 MG/M3 | | |
| OSHA PEL - 100 PPM, 465 MG/M3 | | |
| OTHER LIMITS: | | |
| NIOSH REL/TWA : 100 PPM, 465 MG/M3 | | |
| ISOPROPYL ALCOHOL | 67-63-0 | 14.13 |
| ACGIH TLV/TWA : 200PPM, 492MG/M3; STEL/CEIL:400PPM | | |
| OSHA PEL : 400 PPM, 980MG/M3 | | |
| OTHER LIMITS: | | |
| NIOSH REL/TWA: 400PPM, 960MG/M3; STEL/CEIL:500PPM | | |
| BENZYL ALCOHOL | 100-51-6 | 7.24 |
| ACGIH TLV/TWA - NOT ESTABLISHED | | |
| OSHA PEL - NOT ESTABLISHED | | |
| OTHER LIMITS: | | |
| AIHA WEEL: 10PPM(TWA), 44.2MG/M3(TWA) | | |
| POLYAMINE RESIN | N/A | 4.36 |
| ACGIH TLV/TWA - Not Established | | |
| OSHA PEL - Not Established | | |
| OTHER INFORMATION: | | |
| WARNING: Corrosive to skin and eyes, avoid contact. | | |
| TRIETHYLENETETRAMINE (TETA) | 112-24-3 | 1.81 |
| ACGIH TLV/TWA - NOT ESTABLISHED | | |
| OSHA PEL - NOT ESTABLISHED | | |

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW:**

Harmful if inhaled. May cause the following effects:
Nose, throat and respiratory tract irritation. Allergic respiratory reaction.
May cause lung damage. Eye and skin irritation. Allergic skin reaction.

FLAMMABLE LIQUID

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Keep away from heat, sparks, and flame.
Vapors may cause flash fire.
Toxic gases/fumes are given off during burning or thermal decomposition.

EYE CONTACT:
Can cause irritation.

SKIN CONTACT:
Can cause irritation. May cause defatting of the skin.
Prolonged or repeated skin contact may cause dermatitis.

PRIMARY ROUTES OF ENTRY:
Dermal and inhalation.

INGESTION:
If swallowed, consult a physician immediately.
May cause mucosal damage.

INHALATION:
Anesthetic. Can cause irritation of the respiratory tract or acute nervous system depression characterized by the following progressive steps if severe overexposure is continued: headache, dizziness, staggering gait, confusion or unconsciousness.

CHRONIC INFORMATION:
See Section 11.

CARCINOGENICITY:
See Section 11.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:
Asthma and other respiratory ailments; chemical sensitization.

4. FIRST AID MEASURES

EYE CONTACT:
Flush immediately with large amounts of running water for at least 15 minutes while lifting eyelids. Take to a physician for medical treatment.

SKIN CONTACT:
Wash affected areas with soap and water. Remove contaminated clothing and wash before reuse. Consult a physician if irritation develops or persists.

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INGESTION:

If swallowed, CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

NOTE TO PHYSICIANS: Symptoms may not appear for several hours. Keep under medical supervision for at least 48 hours.

INHALATION:

Remove from exposure. Restore breathing. Keep warm and quiet. Notify a physician.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION PROPERTIES:

FLASH POINT (deg.F) :

53

METHOD:

Tag Closed Cup

FLAMMABLE LIMITS % :

Lower limit: 1.1

Upper limit: 12

AUTOIGNITION TEMPERATURE:

N/A

EXTINGUISHING MEDIA:

Carbon Dioxide, Dry Chemical or Foam.

FIREFIGHTING PROCEDURES AND EQUIPMENT:

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flames. Closed container may explode when exposed to extreme heat. Do not apply to hot surfaces. Never use welding or cutting torch on or near product container (even empty) because product (even residue) can ignite explosively. Full protective equipment including self-contained breathing apparatus should be worn. Water spray may be ineffective. Water may be used to cool closed containers to prevent pressure build-up or possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED :

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Evacuate all non-essential personnel and remove all sources of ignition (flames, hot surfaces, electrical, static and frictional sparks). Ventilate area. Equip clean-up crew with appropriate protective equipment. Avoid breathing vapors. Avoid skin contact. Prevent entry into drains, sewers and waterways. Notify appropriate authorities if necessary. Contain and remove with inert absorbent and nonsparking tools.

7. HANDLING AND STORAGE

HANDLING:

Use only with adequate ventilation. Avoid prolonged breathing of vapors. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates that vapor/mist levels are below applicable exposure limits. Follow respirator manufacturer's directions for use. Use grounding and bonding connection when transferring material to prevent static discharge, fire or explosion. Avoid free fall of liquid in excess of a few inches. Use sparkproof tools and explosion proof equipment.

STORAGE:

Do not store above 120 F or below 32 F. Store large quantities in buildings designed to comply with OSHA's 29 CFR 1910.106. Keep away from heat, sparks and open flame. Keep containers closed when not in use. Keep closures tight and upright to prevent leakage. Emptied containers may retain hazardous residue. Follow all hazard precautions in this data sheet until container is thoroughly cleaned or destroyed. To avoid spontaneous combustion during temporary storage, soak soiled rags and waste immediately after use in a water-filled, closed container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Provide general dilution or local exhaust ventilation in volume and pattern to keep the air contaminant concentration below current applicable OSHA safety and health requirements in the mixing, application and curing areas; and to remove decomposition products during welding and flame cutting on surfaces coated with this product.

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RESPIRATORY PROTECTION:

When spray applied, sanding, grinding, flame cutting, welding, hazing material coated with this product, or when used in limited ventilation areas, wear a NIOSH/MSHA approved organic vapor/particulate respirator designed to remove a combination of particulate, gas and vapor. Observe OSHA regulations for respirator use (29 CFR 1910.134). Air monitoring of the workplace may be required to determine appropriate respirator selection. When exposure limits are not known, it is recommended to use a NIOSH/MSHA approved air line type respirator or hood.

EYE PROTECTION:

Use safety eyewear with splash guards or side shields. A full face shield may be appropriate. Contact lenses should not be worn.

SKIN PROTECTION:

It is good industrial hygiene practice to minimize skin contact. Chemical resistant gloves are required for prolonged or repeated contact. An apron may be appropriate to protect against skin contact. Prevent prolonged skin contact with contaminated clothing. Wash contaminated clothing before reuse.

OTHER PROTECTIVE EQUIPMENT AND GUIDLINES:

Safety showers and eye wash stations should be available. Educate and train employees in the safe use of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:

Liquid.

APPEARANCE:

Yellowish-Clear.

ODOR:

Solvent odor.

VOC (LB/GL):

4.29 lb/gl

VOC (grams/liter):

514 g/l

WEIGHT PER GALLON:

7.4405 lb/gl

SPECIFIC GRAVITY:

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.8936

%EXEMPT SOLVENT by WEIGHT:

0

%EXEMPT SOLVENT by VOLUME:

0

BOILING POINT (deg. F):

177

WATER SOLUBILITY:

Negligible.

FREEZING POINT (deg. F):

N/A

10. STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions.

HAZARDOUS POLYMERIZATION:

Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

May produce hazardous fumes when heated to decomposition as in welding. Fumes may contain the following:
Carbon Monoxide, Carbon Dioxide and other toxic vapors depending upon the temperature reached.

INCOMPATIBILITIES (MATERIALS TO AVOID):

Strong oxidizers.

Nitrites, nitrosating agents. Oxidizing agents such as perchlorates, nitrates, etc. Cleaning solutions such as Chromerge (Sulfuric acid with dichromate) and aqua regia. A reaction accompanied by a large heat release occurs when the product is mixed with acids.

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

Has not been tested as a whole for acute effects.

CHRONIC EFFECTS:

Repeated and/or prolonged skin contact may result in skin sensitization, rash, itching, swelling and other symptoms similar to allergic dermatitis.
Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage, liver and kidney damage. Long term overexposure effects are not currently known.

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Has not been tested as a whole for chronic effects.

CARCINOGENICITY:

This product has not been tested as a whole for carcinogenicity.

Has not been tested as a whole for carcinogenicity effects.

MUTAGENICITY:

Has not been tested as a whole for mutagenicity effects.

REPRODUCTIVE EFFECTS:

Has not been tested as a whole for reproductive effects.

DEVELOPMENTAL EFFECTS:

Has not been tested as a whole for developmental effects.

12. ECOLOGICAL INFORMATION

ECOLOGICAL EFFECTS:

Has not been tested as a whole for ecological effects.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:

Recycle, fuel blend or incinerate.
Dispose of in accordance with applicable laws and regulations. It is the responsibility of the owner of the waste to dispose of it properly. Laboratory analysis is recommended to profile the waste for proper disposal determination.

U.S E.P.A WASTE NUMBER AND DESCRIPTION:

D001 WASTE PAINT RELATED MATERIAL

HAZARDOUS WASTE CHARACTERISTICS:

Ignitable.

14. TRANSPORT INFORMATION

UN NUMBER:

UN1263

DOT PROPER SHIPPING NAME:

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DOT HAZARD CLASS:

3

DOT LABEL:

Flammable Liquid

DOT PACKAGING GROUP:

PG II

U.S POSTAL SERVICE:

Will not handle.

15. REGULATORY INFORMATION

(Not meant to be all inclusive - selected regulations represented)

TSCA STATUS:

All ingredients are listed on the TSCA inventory.

STATE REGULATIONS:

This product may contain chemicals that fall under individual state Right-to-Know regulatory requirements. See Section 2 for material listings. For details on regulatory requirements, contact the appropriate agency in your state.

16. OTHER INFORMATION

Date of issue: 11/8/2012

Last Revision Date: 10/16/12

HMIS Information

HEALTH: 2

FLAMMABILITY: 3

REACTIVITY: 1

PERSONAL PROTECTIVE EQUIPMENT: X

DISCLAIMER:

This MSDS is provided as an informational resource only. The information is received from a combination of sources, including raw material suppliers and is believed to be reliable and accurate. It does not intend to be all-inclusive and shall only be used as a guide. Changing reporting requirements and other uncontrolled variables make it impossible to guarantee the accuracy of

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