



# SAFETY DATA SHEET

Issuing Date: 29-May-2013

Revision Date: 17-Jun-2016

Revision Number: 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: 22170CEH

Product Name: EPOXY HARDENER MIL-DTL-53022E, TYPE IV, PART B

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

Company Phone Number: 1-414-353-4200

Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use

Industrial paint (Paint or Paint-Related), Restricted to professional users

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 3

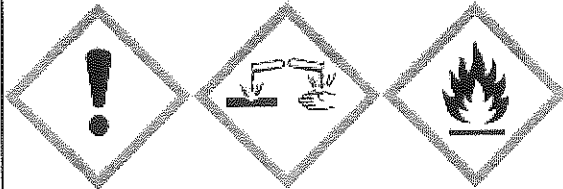
### Label Elements

#### Emergency Overview

**DANGER**

#### Hazard Statements

Causes severe skin burns and eye damage  
May cause an allergic skin reaction  
May cause drowsiness or dizziness  
Flammable liquid and vapor



Appearance Clear

Physical state Liquid

Odor Solvent

#### Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Contaminated work clothing should not be allowed out of the workplace  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/Bond container and receiving equipment  
Use explosion-proof electrical/ ventilating/ lighting/ equipment

Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
If skin irritation or rash occurs: Get medical advice/attention  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting  
In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store in accordance with local regulations

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**Other information**

- May be harmful if swallowed
- May be harmful in contact with skin

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

There are no known carcinogenic chemicals in this product.

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
1-METHOXY-2-PROPANOL	107-98-2	20% - 30%	STEL: 100 ppm TWA: 50 ppm	N/A
METHYL AMYL KETONE	110-43-0	10% - 20%	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m <sup>3</sup>
ETHYLENE GLYCOL PROPYL ETHER	2807-30-9	10% - 20%	N/A	N/A
DIETHYLENETRIAMINE	111-40-0	5% - 10%	TWA: 1 ppm S*	N/A

**4. FIRST AID MEASURES**

**First Aid Measures**

**General advice** Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.

**Eye Contact** Immediately flush eyes with water for at least 15 minutes. Get medical attention. If easy to do, remove contact lenses. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Skin Contact** Remove and wash contaminated clothing and gloves, including the inside, before re-use. If skin irritation persists, call a physician. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

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Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Consult a physician if necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Self-protection of the first aider	Remove all sources of ignition. Use personal protective equipment as required.
Most important symptoms and effects, both acute and delayed	
Most Important Symptoms and Effects	No information available.
Indication of any immediate medical attention and special treatment needed	
Notes to physician	May cause sensitization of susceptible persons. Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available.

### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Flammable.

### Explosion Data

**Sensitivity to Mechanical Impact** no data available.

**Sensitivity to Static Discharge** Yes.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists. Ventilate the area.

### Environmental Precautions

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

### Methods and materials for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling**                      Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilation and lighting) equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use with local exhaust ventilation. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe vapor or mist. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**                      Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks and flame. Keep containers tightly closed in a cool, well-ventilated place.

**Incompatible Products**                      None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH	OSHA	NIOSH IDLH
1-METHOXY-2-PROPANOL 107-98-2	STEL: 100 ppm TWA: 50 ppm	N/A	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup> STEL: 150 ppm STEL: 540 mg/m <sup>3</sup>
METHYL AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m <sup>3</sup>	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m <sup>3</sup>
DIETHYLENETRIAMINE 111-40-0	TWA: 1 ppm S*	N/A	TWA: 1 ppm TWA: 4 mg/m <sup>3</sup>

NIOSH IDLH: *Immediately Dangerous to Life or Health*

**Exposure controls**

**Engineering Measures**                      Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**                      Use personal protective equipment as required.

**Skin and Body Protection**                      Chemical resistant apron.

**Respiratory Protection**                      If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures**                      Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	Liquid	Appearance	Clear
Odor	Solvent.	Odor Threshold	No data available
pH	No data available	Flash Point	88 °F / 31 °C

Decomposition temperature	No data available	Boiling Point	248 °F / 120 °C
Melting Point / Melting Range	No data available	Freezing Point	No data available
Vapor Pressure @20°C (kPa)	No data available	Partition coefficient:	No data available
Vapor Density	No data available	Density	No data available
Bulk density	No data available	Specific Gravity	0.96
Evaporation Rate	No data available	Water solubility	No data available
Dynamic viscosity	No data available	Weight per Gallon (lbs/gal):	8.02
		Flammability Limits in Air	
		Upper	8.62 %
		Lower	0.99 %

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Conditions to Avoid**

Heat, flames and sparks.

**Incompatible Materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<b>Product Information</b>	The product has not been tested
<b>Inhalation</b>	There is no data for this product.
<b>Eye Contact</b>	There is no data for this product.
<b>Skin Contact</b>	There is no data for this product.
<b>Ingestion</b>	There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
1-METHOXY-2-PROPANOL 107-98-2	5000 mg/kg ( Rat )	13 g/kg ( Rabbit )	6 mg/L ( Rat ) 4 h
METHYL AMYL KETONE 110-43-0	1600 mg/kg ( Rat )	12.6 mL/kg ( Rabbit )	2000 ppm ( Rat ) 4 h
DIETHYLENETRIAMINE 111-40-0	1080 mg/kg ( Rat )	672 mg/kg ( Rabbit )	70 mg/L ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms**                                  No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	No information available.
<b>MUTAGENIC EFFECTS</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Legend:</b>	
<b>Reproductive Toxicity</b>	No information available.
<b>Specific target organ systemic</b>	No information available.

toxicity (single exposure)	
Specific target organ systemic toxicity (repeated exposure)	No information available.
Chronic Toxicity	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
Target Organ Effects	Central nervous system (CNS), Eyes, Peripheral Nervous System (PNS), Respiratory system, Skin.
Aspiration hazard	No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	2312 mg/kg
ATEmix (dermal)	2968 mg/kg
ATEmix (inhalation-dust/mist)	5.6 mg/l
Oral LD50	3301 mg/kg (rat) Estimated
Dermal LD50	3123 mg/kg (rat) Estimated

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
1-METHOXY-2-PROPANOL 107-98-2	N/A	20.8: 96 h Pimephales promelas g/L LC50 static	23300: 48 h Daphnia magna mg/L EC50
METHYL AMYL KETONE 110-43-0	N/A	126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	N/A
DIETHYLENETRIAMINE 111-40-0	1164: 72 h Pseudokirchneriella subcapitata mg/L EC50 592: 96 h Desmodemus subspicatus mg/L EC50 345.6: 96 h Pseudokirchneriella subcapitata mg/L EC50	1014: 96 h Poecilia reticulata mg/L LC50 semi-static 248: 96 h Poecilia reticulata mg/L LC50 static	16: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
1-METHOXY-2-PROPANOL 107-98-2	-0.437
METHYL AMYL KETONE 110-43-0	1.98
DIETHYLENETRIAMINE 111-40-0	-1.3

**Other adverse effects** No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste treatment methods** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**US EPA Waste Number** D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
DIETHYLENETRIAMINE 111-40-0	Toxic

**14. TRANSPORT INFORMATION**

DOT

UN-No UN1263  
 Proper shipping name Paint  
 Hazard class 3  
 Packing Group III  
 Special Provisions B1, B52, IB3, T2, TP1, TP29  
 Description UN1263, Paint, 3, III  
 Emergency Response Guide Number 128

TDG

UN-No UN1263  
 Proper shipping name Paint  
 Hazard class 3  
 Packing Group III  
 Description UN1263, Paint, 3, III

MEX

UN-No UN1263  
 Proper shipping name Paint  
 Hazard class 3  
 Packing Group III  
 Description UN1263, Paint, 3, III

ICAO

UN-No UN1263  
 Proper shipping name Paint  
 Hazard class 3  
 Packing Group III  
 Special Provisions A3, A72  
 Description UN1263, Paint, 3, III

IATA

UN-No UN1263  
 Hazard class 3  
 Packing Group III  
 ERG Code 3L  
 Special Provisions A3, A72, A192

IMDG/IMO

UN-No UN1263  
 Hazard class 3  
 Packing Group III  
 EmS-No F-E, S-E  
 Special Provisions 163, 223, 367 955

RID

UN-No UN1263  
 Proper shipping name Paint  
 Hazard class 3  
 Packing Group III  
 Classification Code F1  
 Description UN1263, Paint, 3, III

**ADR/RID**

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	III
Classification Code	F1
Tunnel restriction code	(D/E)
Special Provisions	163, 640E, 650, 367
Description	UN1263, Paint, 3, III, (D/E)
ADR/RID-Labels	3

**ADN**

Proper shipping name	Paint
Hazard class	3
Packing Group	III
Classification Code	F1
Special Provisions	163, 640E, 650
Description	UN1263, Paint, 3, III
Hazard Labels	3
Limited Quantity (LQ)	5 L
Ventilation	VE01

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**CAA (Clean Air Act)**

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:



Chemical Name	CAS No	Hazardous air pollutants (HAPs) content
ETHYLENE GLYCOL PROPYL ETHER	2807-30-9	Present

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
1-METHOXY-2-PROPANOL	X	X	X	X	X
METHYL AMYL KETONE	X	X	X	N/A	X
ETHYLENE GLYCOL PROPYL ETHER	N/A	X	X	X	N/A
DIETHYLENETRIAMINE	X	X	X	N/A	X

**International Regulations**

Mexico - Grade

Serious risk, Grade 3

Chemical Name	Carcinogenic Status	Exposure Limits
METHYL AMYL KETONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 235 mg/m <sup>3</sup> Mexico: STEL 100 ppm Mexico: STEL 465 mg/m <sup>3</sup>
DIETHYLENETRIAMINE	N/A	Mexico: TWA 1 ppm Mexico: TWA 4.2 mg/m <sup>3</sup>

**16. OTHER INFORMATION**

**NFPA**

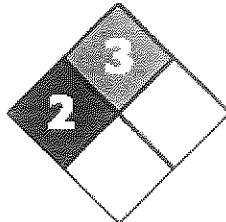
Health Hazard 2

Flammability 3

Instability 0

Physical and Chemical Hazards -

NFPA Rating



**HMIS**

Health Hazard 2 \*

Flammability 3

Physical Hazard 0

Personal protection X

*Chronic Hazard Star Legend*

\* *Chronic Health Hazard*

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Revision Date: 17-Jun-2016

Revision Note

No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. 22170CEH

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