

# SAFETY DATA SHEET

Issuing Date: 22-Dec-2011 Revision Date: 18-Oct-2013 **Revision Number: 1** 

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

Product Code: 03849CEH-HFX Product Name: EPOXY HARDENER MIL-DTL-53022E, TYPE

III, PART B

Hentzen Coatings, Inc.

Company Phone Number: 1-414-353-4200 6937 West Mill Road, Milwaukee, WI 53218-1225 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)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin Corrosion/Irritation	Category 2 Sub-category B
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

#### **Label Elements**

#### **Emergency Overview**

# **DANGER**

#### Hazard Statements

Harmful if swallowed harmful if inhaled

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Highly flammable liquid and vapor





Appearance Clear Physical state Liquid **Odor** Solvent

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**Precautionary Statements - Prevention** 

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

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

If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

If skin irritation occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

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
- · Causes mild skin irritation

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

## There are no known carcinogenic chemicals in this product

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
METHYL AMYL KETONE	110-43-0	20% - 30%	TWA: 50 ppm	TWA: 100 ppm
				TWA: 465 mg/m <sup>3</sup>
METHYL ACETATE	79-20-9	10% - 20%	STEL: 250 ppm	TWA: 200 ppm
			TWA: 200 ppm	TWA: 610 mg/m <sup>3</sup>
BUTYL ALCOHOL	71-36-3	10% - 20%	TWA: 20 ppm	TWA: 100 ppm
				TWA: 300 mg/m <sup>3</sup>

### 4. FIRST AID MEASURES

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**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. Call a physician immediately.

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If symptoms persist, call a physician.

Skin Contact Immediate medical attention is not required. Wash off immediately with soap and plenty of

water while removing all contaminated clothes and shoes. If skin irritation persists, call a

physician.

Inhalation Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Remove to

fresh air. If not breathing, give artificial respiration. 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. Never give anything by mouth to an

unconscious person. Call a physician or poison control center immediately. Clean mouth

with water and afterwards drink plenty of water. 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 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

Extremely flammable.

**Explosion Data** 

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate

ventilation. 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**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do **Environmental Precautions** 

not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread

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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. Dike far ahead of liquid spill for later

disposal.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal

binder, sawdust). Pick up and transfer to properly labeled containers. 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

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep **Storage Conditions** 

containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks and

flame.

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

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### **Exposure Guidelines**

**Chemical Name ACGIH OSHA** NIOSH IDLH METHYL AMYL KETONE TWA: 50 ppm TWA: 100 ppm IDLH: 800 ppm 110-43-0 TWA: 465 mg/m<sup>3</sup> TWA: 100 ppm TWA: 465 mg/m<sup>3</sup> METHYL ACETATE STEL: 250 ppm TWA: 200 ppm IDLH: 3100 ppm 79-20-9 TWA: 200 ppm TWA: 610 mg/m<sup>3</sup> TWA: 200 ppm TWA: 610 mg/m<sup>3</sup> STEL: 250 ppm STEL: 760 mg/m3 **BUTYL ALCOHOL** TWA: 20 ppm TWA: 100 ppm IDLH: 1400 ppm 71-36-3 TWA: 300 mg/m<sup>3</sup> Ceiling: 50 ppm Ceiling: 150 mg/m<sup>3</sup> BENZENE.1-CHLORO-4 TWA: 2.5 mg/m<sup>3</sup> F TWA: 2.5 mg/m<sup>3</sup> F (TRIFLUOROMETHYL) TWA: 2.5 mg/m<sup>3</sup> dust

NIOSH IDLH: Immediately Dangerous to Life or Health

#### **Exposure controls**

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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

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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

Solvent. Odor **Odor Threshold** No data available 14 °F / -10 °C Hq No data available **Flash Point** No data available 133 °F / 56 °C **Decomposition temperature Boiling Point** Melting Point / Melting Range No data available **Freezing Point** No data available Vapor Pressure @20°C (kPa) No data available No data available Partition coefficient: Density **Vapor Density** No data available No data available

Bulk density No data available Specific Gravity 0.93

**Evaporation Rate** No data available **Water solubility** No data available

Dynamic viscosity No data available Weight per Gallon (lbs/gal): 7.73

Flammability Limits in Air

**Upper** 6.78 % **Lower** 1.05 %

# 10. STABILITY AND REACTIVITY

### Reactivity

No data available

#### **Chemical stability**

Stable under recommended storage conditions.

### **Conditions to Avoid**

Extremes of temperature and direct sunlight.

#### **Incompatible Materials**

None known based on information supplied.

#### **Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** The product has not been tested

**Inhalation** There is no data for this product.

**Eye Contact** There is no data for this product.

**Skin Contact** There is no data for this product.

**Ingestion** There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
METHYL AMYL KETONE 110-43-0	1600 mg/kg (Rat)	12.6 mL/kg (Rabbit)	2000 ppm (Rat) 4 h
METHYL ACETATE 79-20-9	5000 mg/kg ( Rat )	5 g/kg(Rabbit)	16000 ppm (Rat) 4 h
BUTYL ALCOHOL 71-36-3	700 mg/kg (Rat)	3402 mg/kg (Rabbit)	8000 ppm (Rat) 4 h
BENZENE,1-CHLORO-4 (TRIFLUOROMETHYL) 98-56-6	13 g/kg (Rat)	2 mL/kg(Rabbit)	33 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

Sensitization No information available.

MUTAGENIC EFFECTS No information available.

Legend:

**Reproductive Toxicity**Specific target organ systemic
No information available.
No information available.

toxicity (single exposure)

Specific target organ systemic No information available.

toxicity (repeated exposure)

**Chronic Toxicity** 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) 1587 mg/kg
ATEmix (dermal) 5143 mg/kg
ATEmix (inhalation-dust/mist) 3.5 mg/l

Oral LD50 5520 mg/kg (rat) Estimated
Dermal LD50 10799 mg/kg (rat) Estimated

Inhalation LC50 119983 mg/l (mist) (dust) mg/m³ Estimated

Inhalation LC50 ml/m³ (vapor) Estimated

### 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
METHYL AMYL KETONE	N/A	126 - 137: 96 h Pimephales	N/A
110-43-0		promelas mg/L LC50 flow-through	

METHYL ACETATE	120: 72 h Desmodesmus	295 - 348: 96 h Pimephales	1026.7: 48 h Daphnia magna mg/L
79-20-9	subspicatus mg/L EC50	promelas mg/L LC50 flow-through	EC50
		250 - 350: 96 h Brachydanio rerio	
		mg/L LC50 static	
BUTYL ALCOHOL	500: 72 h Desmodesmus	1730 - 1910: 96 h Pimephales	1897 - 2072: 48 h Daphnia magna
71-36-3		promelas mg/L LC50 static 1740: 96	
	Desmodesmus subspicatus mg/L	h Pimephales promelas mg/L LC50	Daphnia magna mg/L EC50
	EC50	flow-through 100000 - 500000: 96 h	
		Lepomis macrochirus µg/L LC50	
		static 1910000: 96 h Pimephales	
		promelas μg/L LC50 static	
BENZENE,1-CHLORO-4	N/A	N/A	3.68: 48 h Daphnia magna mg/L
(TRIFLUOROMETHYL)			EC50
98-56-6			

# Persistence and degradability

No information available.

#### **Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
METHYL AMYL KETONE 110-43-0	1.98
METHYL ACETATE 79-20-9	0.18
BUTYL ALCOHOL 71-36-3	0.785

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 U031 D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
BUTYL ALCOHOL	N/A	Included in waste stream:	N/A	U031
71-36-3		F039		

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
METHYL ACETATE	Toxic
79-20-9	Ignitable
BUTYL ALCOHOL	Toxic
71-36-3	

# **14. TRANSPORT INFORMATION**

DOT

VIN-No UN1263
Proper shipping name Paint
Hazard class 3

Packing Group

**Special Provisions** 149, B52, IB2, T4, TP1, TP8, TP28

**Description** UN1263, Paint, 3, II, RQ

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Number

TDG

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II

**Description** UN1263, Paint, 3, II

**MEX** 

VN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II

**Description** UN1263, Paint, 3, II

**ICAO** 

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

**Description** UN1263, Paint, 3, II

**ICAO** 

UN-NoUN1263Proper shipping namePaintHazard class3Packing GroupIISpecial ProvisionsA3, A72

**Description** UN1263, Paint, 3, II

IMDG/IMO

UN-No
UN1263
Proper shipping name
Paint
Hazard class
Packing Group
EmS-No
Special Provisions
UN1263
Paint
Faint
Fa

**Description** UN1263, Paint, 3, II

RID

UN-NoUN1263Proper shipping namePaintHazard class3Packing GroupIIClassification CodeF1

Description UN1263, Paint, 3, II

ADR/RID

UN-No UN1263
Proper shipping name Paint

Hazard class 3
Packing Group II
Classification Code F1
Tunnel restriction code (D/E)

Special Provisions 163, 640C, 650

**Description** UN1263, Paint, 3, II, (D/E)

ADR/RID-Labels 3

ADN

Proper shipping namePaintHazard class3Packing GroupIIClassification CodeF1

**Special Provisions** 163, 640C, 650 **Description** UN1263, Paint, 3, II

Limited Quantity (LQ) 5 L Ventilation VE01

### 15. REGULATORY INFORMATION

**International Inventories** 

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

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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	SARA 313 - Threshold Values %
BUTYL ALCOHOL	71-36-3	1.0

#### 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)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

#### **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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ (reportable quantity)
BUTYL ALCOHOL	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ

### **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
METHYL AMYL KETONE	Χ	X	X	N/A	Х
METHYL ACETATE	Χ	X	X	N/A	Х
BUTYL ALCOHOL	Χ	Х	X	N/A	Х
BENZENE,1-CHLORO-4 (TRIFLUOROMETHYL)	N/A	X	X	N/A	Х

### **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>
METHYL ACETATE	N/A	Mexico: TWA 200 ppm
		Mexico: TWA 610 mg/m <sup>3</sup>
		Mexico: STEL 250 ppm
		Mexico: STEL 760 mg/m <sup>3</sup>
BUTYL ALCOHOL	N/A	Mexico: Ceiling 50 ppm
		Mexico: Ceiling 150 mg/m <sup>3</sup>

16. OTHER INFORMATION					
<u>NFPA</u>	Health Hazard 2	Flammability 3	Instability 0	Physical and Chemical Hazards -	

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HMIS Health Hazard 1 \* Flammability 3 Physical Hazard 0 Personal protection X

Chronic Hazard Star Legend \* Chronic Health Hazard

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**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.

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