



SAFETY DATA SHEET

Issuing Date: 22-Dec-2011

Revision Date: 15-Jan-2013

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Code: 16062CEH-LVOC
Product Name: CLEAR EPOXY HARDENER, MIL-PRF-22750G(I),PART B,TY II,CL H,GR A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Coating
Uses advised against No information available

1.3 Details of the supplier of the safety data sheet

Manufacturer
Hentzen Coatings Incorporated
6937 West Mill Road
Milwaukee, Wisconsin, USA
53218-1225

For further information, please contact:

Contact Point 001 414 353 4200
E-mail Address coatings@hentzen.com

1.4 Emergency telephone number

Emergency telephone - §45 - (EC)1272/2008
Europe CHEMTREC (USA) 001 800 424 9300

2. HAZARDS IDENTIFICATION

2.3. Other hazards

2.1 Classification of the substance or mixture

The preparation is classified as dangerous in accordance with Directive 1999/45/EC

Classification

For the full text of the R-phrases mentioned in this Section, see Section 16

R10 - Xi;R36

Most Important Hazards

Flammable
Irritating to eyes

2.2 Label Elements



Classification

Xi - Irritant

R-phrases(s)

R10 - Flammable
R36 - Irritating to eyes

S-phrases(s)

S 7 - Keep container tightly closed
S 9 - Keep container in a well-ventilated place
S16 - Keep away from sources of ignition - No smoking

S33 - Take precautionary measures against static discharges

Contains TETRAETHYENEPENTAMINE(TEPA). May produce an allergic reaction

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	EC-No	CAS No	Weight-%	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
BUTYL ALCOHOL	Present	71-36-3	5%-10%	R10 Xn; R22 Xi; R37/38-41 R67	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335) STOT SE 3 (H336) Flam. Liq. 3 (H226)	no data available
BENZYL ALCOHOL	Present	100-51-6	5%-10%	Xn; R20/22	Acute Tox. 4 (H302) Acute Tox. 4 (H332)	no data available
TETRAETHYENEPENTAMINE(TEPA)	Present	112-57-2	0%-5%	Xn; R21/22 C; R34 R43 N; R51-53	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)	no data available

For the full text of the R-phrases mentioned in this Section, see Section 16

3.2
Mixtures

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance If symptoms persist, call a physician
Eye Contact	If symptoms persist, call a physician Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes 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
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
Ingestion	Do NOT induce vomiting Drink plenty of water Immediate medical attention is not required 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
Inhalation	Remove to fresh air If symptoms persist, call a physician Immediate medical attention is not required Move to fresh air in case of accidental inhalation of vapors
Self-protection of the first aider	Remove all sources of ignition Use personal protective equipment as required

4.2 Most important symptoms and effects, both acute and delayed

Most Important Symptoms and No information available

Effects

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

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

Extinguishing media which shall not be used for safety reasons

No information available

5.2 Special hazards arising from the substance or mixture

Special Hazard

None in particular

5.3 Advice for fire-fighters

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

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

See Section 12 for additional information

6.2 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

6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)

7. HANDLING AND STORAGE

7.1 Precautions for 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

7.2 Conditions for safe storage, including any incompatibilities

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

7.3 Specific end uses

Specific use(s) Coating

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure limits

Chemical Name	European Union	The United Kingdom	France	Spain	Germany
BUTYL ALCOHOL		STEL: 50 ppm	STEL: 50 ppm	S*	TWA: 100 ppm

71-36-3		STEL: 154 mg/m ³ Skin	STEL: 150 mg/m ³	STEL: 50 ppm STEL: 154 mg/m ³ TWA: 20 ppm TWA: 61 mg/m ³	TWA: 310 mg/m ³ Ceiling / Peak: 100 ppm Ceiling / Peak: 310 mg/m ³
Component	Italy	Portugal	The Netherlands	Finland	Denmark
BUTYL ALCOHOL 71-36-3 (6.383)		TWA: 20 ppm		TWA: 50 ppm TWA: 150 mg/m ³ STEL: 75 ppm STEL: 230 mg/m ³ Skin	Ceiling: 50 ppm Ceiling: 150 mg/m ³ Skin
BENZYL ALCOHOL 100-51-6 (5.10638)				TWA: 10 ppm TWA: 45 mg/m ³	
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
BUTYL ALCOHOL 71-36-3	STEL 200 ppm STEL 600 mg/m ³ TWA: 50 ppm TWA: 150 mg/m ³	STEL: 50 ppm STEL: 150 mg/m ³ TWA: 50 ppm TWA: 150 mg/m ³	STEL: 150 mg/m ³ TWA: 50 mg/m ³	Skin Ceiling: 25 ppm Ceiling: 75 mg/m ³	TWA: 20 ppm STEL: 60 ppm Skin
BENZYL ALCOHOL 100-51-6			TWA: 240 mg/m ³		

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure controls
Engineering Measures

Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Eye Protection

Use personal protective equipment as required

Hand Protection

Protective gloves

Skin and Body Protection

Antistatic boots Wear fire/flame resistant/retardant clothing Impervious gloves Long sleeved clothing Apron

Respiratory Protection

No special protective equipment required

Hygiene Measures

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

Environmental Exposure Controls

Do not allow material to contaminate ground water system

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state Liquid **Appearance** Clear
Odor Solvent

<u>Property</u>	<u>Values</u>	<u>Note</u>
pH VALUE		<u>This temperature may be significantly lower under particular conditions (slow oxidation on finely divided materials...)</u>
Melting/freezing point		no data available
Boiling Point	117 °C / 242 °F	No data available
Flash Point	35 °C / 95 °F	(based on components)
Evaporation rate		No data available
Flammability (solid, gas)		No data available
Flammability Limits in Air		
upper flammability limit	5.18	
lower flammability limit	0.48	
Vapor pressure		no data available

Vapor density		no data available
Relative density	1.13	
Water solubility		no data available
Solubility in other solvents		no data available
Partition coefficient: n-octanol/water		no data available
Autoignition temperature		No data available
Decomposition temperature		no data available
Viscosity		no data available

9.2 Other information

VOC Content 54.04 %

10. STABILITY AND REACTIVITY

10.1 Reactivity

Not applicable

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None under normal use conditions

10.4 Conditions to avoid

Heat, flames and sparks

10.5 Incompatible materials

None in particular

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product Information

Acute Toxicity

Product does not present an acute toxicity hazard based on known or supplied information

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

Oral LD50 18846 mg/kg (rat) Estimated
Dermal LD50 4912 mg/kg (rat) Estimated
Inhalation LC50 32540 mg/l (mist) (dust) mg/m³ Estimated
Inhalation LC50

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
BUTYL ALCOHOL	700 mg/kg (Rat)	3402 mg/kg (Rabbit)	8000 ppm (Rat) 4 h
BENZYL ALCOHOL	1230 mg/kg (Rat)	2 g/kg (Rabbit)	8.8 mg/L (Rat) 4 h
TETRAETHYENEPENTAMINE(TEPA)	2100 mg/kg (Rat)	660 µL/kg (Rabbit)	

Chronic Toxicity

Sensitization No information available
Target Organ Effects Central nervous system (CNS) Eyes Respiratory system Skin

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to daphnia and other aquatic invertebrates
BUTYL ALCOHOL	500: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 500: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	1730 - 1910: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1740: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 100000 - 500000: 96 h <i>Lepomis macrochirus</i> µg/L LC50 static 1910000: 96 h <i>Pimephales promelas</i> µg/L LC50 static	-	1897 - 2072: 48 h <i>Daphnia magna</i> mg/L EC50 Static 1983: 48 h <i>Daphnia magna</i> mg/L EC50
BENZYL ALCOHOL	-	460: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	-	23: 48 h water flea mg/L EC50
TETRAETHYENEPENTAMINE (TEPA)	2.1: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	420: 96 h <i>Poecilia reticulata</i> mg/L LC50 static	-	24.1: 48 h <i>Daphnia magna</i> mg/L EC50

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available

12.6 Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from Residues / Unused Products Dispose of in accordance with local regulations

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal

Other information According to the European Waste Catalogue, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used

14. TRANSPORT INFORMATION

IMDG/IMO

14.1 <u>UN-Number</u>	UN1263
14.2 <u>Proper Shipping Name</u>	PAINT RELATED MATERIAL
14.3 <u>Hazard Class</u>	3
14.4 <u>Packing group</u>	III
Description	UN1263, Paint related material, 3, III
14.5 <u>Environmental Hazards</u>	None
14.6 <u>Special Provisions</u>	
EmS-No	F-E, S-E
14.7 <u>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</u>	No information available

RID

14.1 <u>UN-Number</u>	UN1263
14.2 <u>Proper Shipping Name</u>	PAINT RELATED MATERIAL
14.3 <u>Hazard Class</u>	3
14.4 <u>Packing group</u>	III
Description	UN1263, Paint related material, 3, III
14.5 <u>Environmental Hazards</u>	None
14.6 <u>Special Provisions</u>	
Classification Code	F1

ADR/RID

14.1 <u>UN-Number</u>	UN1263
14.2 <u>Proper Shipping Name</u>	PAINT RELATED MATERIAL
14.3 <u>Hazard Class</u>	3
14.4 <u>Packing group</u>	III
Description	UN1263, Paint related material, 3, III, (D/E)
14.5 <u>Environmental Hazards</u>	None
14.6 <u>Special Provisions</u>	
Classification Code	F1
ADR/RID-Labels	3
Tunnel restriction code	(D/E)

ICAO

14.1 <u>UN-Number</u>	UN1263
14.2 <u>Proper Shipping Name</u>	PAINT RELATED MATERIAL
14.3 <u>Hazard Class</u>	3
14.4 <u>Packing group</u>	III
Description	UN1263, Paint related material, 3, III
14.5 <u>Environmental Hazards</u>	None
14.6 <u>Special Provisions</u>	
Special Provisions	None

ICAO

14.1 <u>UN-Number</u>	UN1263
14.2 <u>Proper Shipping Name</u>	PAINT RELATED MATERIAL
14.3 <u>Hazard Class</u>	3
14.4 <u>Packing group</u>	III
Description	UN1263, Paint related material, 3, III
14.5 <u>Environmental Hazards</u>	None
14.6 <u>Special Provisions</u>	
ERG Code	3L

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

All of the components in the product are on the following Inventory lists: Canada (DSL/NDSL).

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

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical Safety Assessment

No information available

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R10 - Flammable

R67 - Vapors may cause drowsiness and dizziness

R22 - Harmful if swallowed

R34 - Causes burns

R43 - May cause sensitization by skin contact

R36 - Irritating to eyes

R37/38 - Irritating to respiratory system and skin

R20/22 - Harmful by inhalation and if swallowed

R21/22 - Harmful in contact with skin and if swallowed

Issuing Date: 22-Dec-2011

Revision Date: 15-Jan-2013

Revision Note Revision Note not applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

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