

Safety Data Sheet acc. to OSHA HCS

Version 1

Reviewed on 03/07/2017

1 Identification

Printing date 03/07/2017

- · Product identifier
- Product Description: Epoxy Curing Agent
- · Product code: Cardolite Ultra LITE 2009H
- · Application of the substance / the mixture Coating
- · Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Cardolite Corporation 11 Deer Park Drive, Suite 124 Monmouth Junction, NJ 08852 USA Tel: (973) 344-5015 Regulatory@cardolite.com

· Information department: Product safety department

· Emergency telephone number: 24 Hour Emergency: 800-424-9300 CHEMTREC

2 Hazard(s) identification

· Classification of the substance or mixture

GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS). • Hazard pictograms



· Signal word Danger

- Hazard-determining components of labeling: Benzyl Alcohol
 3-Aminomethyl-3,5,5-Trimethylcyclohexylamine
 Hazard statements
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.

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y statements
Do not breathe dusts or mists.
P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P338 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/doctor.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
n system:
s (scale 0 - 4)
Health = 3 Fire = 1 Reactivity = 0
s (scale 0 - 4)
Health = 3 Fire = 1 Reactivity = 0
-
ls 3T and vPvB assessment

3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerou	s Components:	
	Benzyl Alcohol	30.0 - 40.0%
	Acute Tox. 4, H302; Acute Tox. 4, H332	
	3-Aminomethyl-3,5,5-Trimethylcyclohexylamine Skin Corr. 1B, H314; () Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	15.0 - 25.0%

4 First-aid measures

· Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• After inhalation: Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

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After swallowing:

Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.

• Advice for firefighters Promptly isolate the scene by removing all person from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

· Protective equipment: No special measures required.

6 Accidental release measures

 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

- Ensure adequate ventilation.
- Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

Protective Action Criteria for Chemicals

 · PAC-1:
 100-51-6
 Benzyl Alcohol
 30 ppm

 · PAC-2:
 100-51-6
 Benzyl Alcohol
 52 ppm

 · PAC-3:
 100-51-6
 Benzyl Alcohol
 740 ppm

7 Handling and storage

- · Handling:
- Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.

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- Conditions for safe storage, including any incompatibilities
- Keep container tightly closed and in a well ventilated place.
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace: The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

100-51-6 Benzyl Alcohol

WEEL Long-term value: 10 ppm

• Additional information: The lists that were valid during the creation were used as basis.

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin.
- Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical prope	erties
 Information on basic physical and General Information Appearance: 	I chemical properties
Form:	Liquid
Color:	Yellow tint
· Odor:	Amine-like
· Odor threshold:	Not determined.
· pH-value:	Not determined.
 Change in condition Melting point/Melting range: 	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	> 93 °C (> 199 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
 Danger of explosion: 	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 25 °C (77 °F):	1.0329 g/cm ³ (8.62 lbs/gal)
 Relative density 	Not determined.
· Vapor density	Not determined.
Evaporation rate	Not determined.
 Solubility in / Miscibility with Water: 	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wa	
· Viscosity:	
Dynamic at 25 ℃ (77 °F):	370 cps
Kinematic:	Not determined.
· Solvent content:	
Solids content:	97.5 %
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· Other information

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No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability Product is stable.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

- · Acute toxicity:
- LD/LC50 values that are relevant for classification: Irritating to eyes and skin.

100-51-6 Benzyl Alcohol

Oral LD50 1230 mg/kg (rat)

Dermal LD50 2000 mg/kg (rabbit)

- · Primary irritant effect:
- on the skin: Caustic effect on skin and mucous membranes.
- · on the eye:

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

• Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

- Harmful
- Corrosive

Irritant

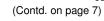
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- · Carcinogenic categories
- IARC (International Agency for Research on Cancer)
 None of the ingredients is listed.
 NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.



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12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information · UN-Number · DOT, ADR, IMDG, IATA UN2735 · UN proper shipping name · DOT Amines, liquid, corrosive, n.o.s. (Isophoronediamine) · ADR 2735 Amines, liquid, corrosive, n.o.s. (Isophoronediamine) · IMDG, IATA AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE) · Transport hazard class(es) · DOT Class 8 Corrosive substances (Contd. on page 8)



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· Label	8
· ADR, IMDG, IATA	
· Class · Label	8 Corrosive substances 8
 Packing group DOT, ADR, IMDG, IATA 	III
 Environmental hazards: Marine pollutant: 	No
 Special precautions for user Danger code (Kemler): EMS Number: Segregation groups Stowage Category Segregation Code 	Warning: Corrosive substances 80 F-A,S-B Alkalis A SG35 Stow "separated from" acids.
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	II of Not applicable.
 Transport/Additional information: DOT Quantity limitations 	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
 ADR Excepted quantities (EQ) 	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
 IMDG Limited quantities (LQ) Excepted quantities (EQ) 	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S (ISOPHORONEDIAMINE), 8, III

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

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All ingredient	c Substances Control Act):
· Proposition	
•	nown to cause cancer:
	ngredients is listed.
	nown to cause reproductive toxicity for females:
None of the i	ngredients is listed.
	nown to cause reproductive toxicity for males:
None of the i	ngredients is listed.
· Chemicals k	nown to cause developmental toxicity:
None of the i	ngredients is listed.
· Carcinogeni	ic categories
· EPA (Enviro	nmental Protection Agency)
None of the i	ngredients is listed.
· TLV (Thresh	nold Limit Value established by ACGIH)
None of the i	ngredients is listed.
· NIOSH-Ca (I	National Institute for Occupational Safety and Health)
•	ngredients is listed.
· GHS label e	is classified and labeled according to the Globally Harmonized System (GHS).
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• Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department
- · Contact: Mr Eleazar dela Cruz
- · Date of preparation / last revision 03/07/2017 / -
- · Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TVL: Treshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Tox. 4: Acute toxicity - Category 4 Skin Corr. 1B: Skin corrosion/irritation - Category 1B Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Skin Sens. 1: Skin sensitisation - Category 1 119