

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/17/2017

Version 1

Reviewed on 03/17/2017

1 Identification

- **Product identifier**
- **Product Description:** Epoxy Novolac Resin
- **Product code:** Cardolite NC-547
- **Application of the substance / the mixture**
Coating
Coat adhesive
- **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**



GHS07

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

Flam. Liq. 4 H227 Combustible liquid.

Eye Irrit. 2B H320 Causes eye irritation.

- **Label elements**

- **GHS label elements**

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

- **Hazard pictograms**



GHS07

- **Signal word** Warning

- **Hazard-determining components of labeling:**

Cashew Nutshell Liquid Epoxy

- **Hazard statements**

H227 Combustible liquid.

H320 Causes eye irritation.

H317 May cause an allergic skin reaction.

- **Precautionary statements**

P210 Keep away from flames and hot surfaces. – No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

(Contd. on page 2)

US

Safety Data Sheet acc. to OSHA HCS

Printing date 03/17/2017

Version 1

Reviewed on 03/17/2017

Product Description: Epoxy Novolac Resin

(Contd. of page 1)

P321 Specific treatment (see on this label).
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
 Fire = 2
 Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 1
 Fire = 2
 Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

• **Dangerous Components:**

115487-50-8	Cashew Nutshell Liquid Epoxy	> 99.0%
	⚠ Skin Sens. 1, H317; Eye Irrit. 2B, H320	
1330-20-7	Xylenes	< 1.0%
	⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	

4 First-aid measures

- **Description of first aid measures**
- **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. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult 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.

US

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/17/2017

Version 1

Reviewed on 03/17/2017

Product Description: Epoxy Novolac Resin

(Contd. of page 2)

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** Not required.
- **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).
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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **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:**1330-20-7 Xylenes**PEL Long-term value: 435 mg/m³, 100 ppm

(Contd. on page 4)

US

Safety Data Sheet acc. to OSHA HCS

Printing date 03/17/2017

Version 1

Reviewed on 03/17/2017

Product Description: Epoxy Novolac Resin

(Contd. of page 3)

REL	Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm
BEI	

Ingredients with biological limit values:

1330-20-7 Xylenes

BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
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- **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:**
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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.

Eye protection:



Tightly sealed goggles

Body protection: Protective work clothing

US

(Contd. on page 5)

Safety Data Sheet acc. to OSHA HCS

Printing date 03/17/2017

Version 1

Reviewed on 03/17/2017

Product Description: Epoxy Novolac Resin

(Contd. of page 4)

9 Physical and chemical properties

• Information on basic physical and chemical properties	
• General Information	
• Appearance:	
Form:	Liquid
Color:	Amber colored
• Odor:	Mineral-oil-like
• Odor threshold:	Not determined.
• pH-value:	Not determined.
• Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
• Flash point:	66 °C (151 °F)
• Flammability (solid, gaseous):	Not applicable.
• Ignition temperature:	
Decomposition temperature:	Not determined.
• Auto igniting:	Product is not selfigniting.
• Danger of explosion:	Not determined.
• Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
• Vapor pressure:	Not determined.
• Density at 25 °C (77 °F):	0.93465 g/cm ³ (7.8 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/water): Not determined.	
• Viscosity:	
Dynamic at 25 °C (77 °F):	30000 cps
Kinematic:	Not determined.
• Solvent content:	
Solids content:	~99.0 %
• Other information	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.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/17/2017

Version 1

Reviewed on 03/17/2017

Product Description: Epoxy Novolac Resin

(Contd. of page 5)

- **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.
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
 The product shows the following dangers according to internally approved calculation methods for preparations:
 Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

1330-20-7	Xylenes	3
106-89-8	1-Chloro-2,3-Epoxypropane	2A

- **NTP (National Toxicology Program)**

106-89-8	1-Chloro-2,3-Epoxypropane	R
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- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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

US

(Contd. on page 7)

Safety Data Sheet acc. to OSHA HCS

Printing date 03/17/2017

Version 1

Reviewed on 03/17/2017

Product Description: Epoxy Novolac Resin

(Contd. of page 6)

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, ADN, IMDG, IATA | Non-hazardous for transport |
| • UN proper shipping name | |
| • DOT, ADR, ADN, IMDG, IATA | Non-hazardous for transport |
| • Transport hazard class(es) | |
| • DOT, ADR, IMDG, IATA | |
| • Class | Non-hazardous for transport |
| • Label | - |
| • ADN/R Class: | Non-hazardous for transport |
| • Packing group | |
| • DOT, ADR, IMDG, IATA | Non-hazardous for transport |
| • Environmental hazards: | |
| • Marine pollutant: | No |
| • Special precautions for user | Not applicable. |
| • EMS Number: | - |
| • Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| • UN "Model Regulation": | UN-, - |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

• Section 355 (extremely hazardous substances):

106-89-8	1-Chloro-2,3-Epoxypropane
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• Section 313 (Specific toxic chemical listings):

1330-20-7	Xylenes
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106-89-8	1-Chloro-2,3-Epoxypropane
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• TSCA (Toxic Substances Control Act):

All ingredients are listed.

(Contd. on page 8)

US

Safety Data Sheet acc. to OSHA HCS

Printing date 03/17/2017

Version 1

Reviewed on 03/17/2017

Product Description: Epoxy Novolac Resin

(Contd. of page 7)

• Proposition 65

• Chemicals known to cause cancer:

106-89-8	1-Chloro-2,3-Epoxypropane
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• Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

• Chemicals known to cause reproductive toxicity for males:

106-89-8	1-Chloro-2,3-Epoxypropane
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• Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

• Carcinogenic categories

• EPA (Environmental Protection Agency)

1330-20-7	Xylenes	I
106-89-8	1-Chloro-2,3-Epoxypropane	B2

• TLV (Threshold Limit Value established by ACGIH)

1330-20-7	Xylenes	A4
106-89-8	1-Chloro-2,3-Epoxypropane	A3

• NIOSH-Ca (National Institute for Occupational Safety and Health)

106-89-8	1-Chloro-2,3-Epoxypropane
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• GHS label elements

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

• Hazard pictograms



GHS07

• Signal word Warning

• Hazard-determining components of labeling:

Cashew Nutshell Liquid Epoxy

• Hazard statements

H227 Combustible liquid.

H320 Causes eye irritation.

H317 May cause an allergic skin reaction.

• Precautionary statements

P210 Keep away from flames and hot surfaces. – No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

• Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

US

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/17/2017

Version 1

Reviewed on 03/17/2017

Product Description: Epoxy Novolac Resin

(Contd. of page 8)

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** 03/17/2017 / -
- **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

BEL: Biological Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

Skin Sens. 1: Skin sensitisation – Category 1

US