

Printing date 02/23/2018

Version 2

Reviewed on 02/23/2018

## 1 Identification

- **Product identifier**
- **Product Description: Flexible Epoxy Resin**
- **Product code:** Cardolite NC-514
- **CAS Number:**  
68390-54-5
- **Application of the substance / the mixture**  
Epoxy resin  
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**



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

- **Label elements**
- **GHS label elements**  
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



- **Signal word** Warning
- **Hazard-determining components of labeling:**  
Cashew, nutshell liq., polymer with epichlorohydrin and phenol
- **Hazard statements**  
H317 May cause an allergic skin reaction.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
P280 Wear protective gloves.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P321 Specific treatment (see on this label).  
P363 Wash contaminated clothing before reuse.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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### Product Description: Flexible Epoxy Resin

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



Health = 1  
Fire = 2  
Reactivity = 0

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



HEALTH 1 Health = 1  
FIRE 2 Fire = 2  
REACTIVITY 0 Reactivity = 0

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

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**  
68390-54-5 Cashew, nutshell liq., polymer with epichlorohydrin and phenol 100%
- **Identification number(s)**  
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

### 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.
- **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.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, 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.

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**Product Description: Flexible Epoxy Resin**

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- **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).  
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:**

Substance is not listed.

· **PAC-2:**

Substance is not listed.

· **PAC-3:**

Substance is not listed.

**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**  
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:** None.
- **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:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**  
Use local exhaust ventilation. Suitable respiratory equipment should be used in cases of insufficient ventilation.

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- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.
- **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.
- **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:** Goggles recommended during refilling.
- **Body protection:** Protective work clothing

**9 Physical and chemical properties**

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

|                 |                  |
|-----------------|------------------|
| Form:           | Liquid           |
| Color:          | Red-brown        |
| Odor:           | Mineral-oil-like |
| Odor threshold: | Not determined.  |

- **pH-value at 25 °C (77 °F):** 8

- **Change in condition**

|                              |               |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | Undetermined. |

- **Flash point:** ~90 °C (~194 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Not determined.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

|        |                 |
|--------|-----------------|
| Lower: | Not determined. |
|--------|-----------------|

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|   |   |
|---|---|
| <b>Upper:</b>                                     | Not determined.                             |
| · <b>Vapor pressure:</b>                          | Not determined.                             |
| · <b>Density at 25 °C (77 °F):</b>                | 1.10001 g/cm <sup>3</sup> (9.17958 lbs/gal) |
| · <b>Relative density</b>                         | Not determined.                             |
| · <b>Vapor density</b>                            | Not determined.                             |
| · <b>Evaporation rate</b>                         | Not determined.                             |
| · <b>Solubility in / Miscibility with Water:</b>  | Not miscible or difficult to mix.           |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                             |
| · <b>Viscosity:</b>                               |   |
| <b>Dynamic at 25 °C (77 °F):</b>                  | 16000 cps                                   |
| <b>Kinematic:</b>                                 | Not determined.                             |
| · <b>Solvent content:</b>                         |   |
| <b>Solids content:</b>                            | ~ 99.0 %                                    |
| · <b>Other information</b>                        | 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:**

**68390-54-5 Cashew, nutshell liq., polymer with epichlorohydrin and phenol**

|      |      |                    |
|------|------|--------------------|
| Oral | LD50 | 44,444 mg/kg (rat) |
|------|------|--------------------|

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

- **Carcinogenic categories**

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

|                          |
|--------------------------|
| Substance is not listed. |
|--------------------------|

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 · **NTP (National Toxicology Program)**

Substance is not listed.

 · **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not 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.

**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**

N/A

 · **DOT, ADR, ADN, IMDG, IATA**

Non-hazardous for transport

 · **UN proper shipping name**

Not regulated as dangerous goods

 · **DOT, ADR, ADN, IMDG, IATA**

Non-hazardous for transport

 · **Transport hazard class(es)**

 · **DOT, ADN, IMDG, IATA**

 · **Class**

Non-hazardous for transport

 · **ADR**

 · **Class**

Non-hazardous for transport

Miscellaneous dangerous substances and articles

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- |  |                             |
|--|-----------------------------|
| <ul style="list-style-type: none"> <li>• <b>Packing group</b></li> <li>• <b>DOT, ADR, IMDG, IATA</b></li> </ul>                    | Non-hazardous for transport |
| <ul style="list-style-type: none"> <li>• <b>Environmental hazards:</b></li> <li>• <b>Marine pollutant:</b></li> </ul>              | No                          |
| <ul style="list-style-type: none"> <li>• <b>Special precautions for user</b></li> </ul>  | Not applicable.             |
| <ul style="list-style-type: none"> <li>• <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b></li> </ul> | Not applicable.             |
| <ul style="list-style-type: none"> <li>• <b>UN "Model Regulation":</b></li> </ul>  | Non-hazardous for transport |

**15 Regulatory information**

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

- **Section 355 (extremely hazardous substances):**

Substance is not listed.

- **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

- **TSCA (Toxic Substances Control Act):**

Substance is listed.

- **TSCA new (21st Century Act) (Substances not listed)**

68390-54-5 | Cashew, nutshell liq., polymer with epichlorohydrin and phenol

- **Proposition 65**

- **Chemicals known to cause cancer:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

- **Chemicals known to cause developmental toxicity:**

Substance is not listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

Substance is not listed.

- **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

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

Substance is not listed.

- **GHS label elements**

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

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**Product Description: Flexible Epoxy Resin**

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· **Hazard pictograms**

GHS07

· **Signal word** Warning· **Hazard-determining components of labeling:**

Cashew, nutshell liq., polymer with epichlorohydrin and phenol

· **Hazard statements**

H317 May cause an allergic skin reaction.

· **Precautionary statements**

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

P280 Wear protective gloves.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse.

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.**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** 02/23/2018 / 1· **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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

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 &amp; Health

TTL: Treshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Sens. 1: Skin sensitisation – Category 1