

Version 2

Reviewed on 08/06/2017

## **1** Identification

Printing date 08/06/2017

- · Product identifier
- Product Description: <u>CNSL</u> based polyether polyol
- Product code: Cardolite NX-9008
- Application of the substance / the mixture Experimental product for R&D
- · 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 product 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
- · Hazard statements
- H317 May cause an allergic skin reaction.
- Precautionary statements
- Wear Chemical resistant impervious gloves.
- Remove content in container as much as possible.
- Avoid contact with surface water.
- Incinerate contens/container in accordance with local / regional / national / international regulations.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P280 Wear protective gloves.
- P321 Specific treatment (see on this label).
- P363 Wash contaminated clothing before reuse.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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#### Product Description: CNSL based polyether polyol

(Contd. of page 1) Classification system: · NFPA ratings (scale 0 - 4) Health = 1Fire = 1Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH 1 Health = 1 1 FIRE Fire = 1Reactivity = 0REACTIVITY 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: 68413-24-1 Cashew, nutshell liq., polymer with epichlorohydrin < 5.0% • Skin Sens. 1, H317

#### 4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · 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: Use fire fighting measures that suit the environment.
- 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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• Protective equipment: No special measures required.

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#### 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.

#### 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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- 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:

For inhalation exposures, wear NIOSH-approved respirators with Assigned Protection Factor (APF) of 1000.

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· Protection of hands:



Protective gloves

Impervious gloves

Chemical resistant protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

#### 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: Goggles recommended during refilling.
- · Body protection: Protective work clothing

### 9 Physical and chemical properties

<ul> <li>Information on basic physical and</li> <li>General Information</li> </ul>	chemical properties
<ul> <li>General Information</li> <li>Appearance: Form: Color:</li> <li>Odor:</li> <li>Odor threshold:</li> </ul>	Liquid Light yellow Mineral-oil-like Not determined.
· pH-value:	Not determined.
<ul> <li>Change in condition</li> <li>Melting point/Melting range:</li> <li>Boiling point/Boiling range:</li> </ul>	Undetermined. Undetermined.
· Flash point:	> 150 °C (> 302 °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.
<ul> <li>Explosion limits: Lower: Upper:</li> </ul>	Not determined. Not determined.
· Vapor pressure:	Not determined.
<ul> <li>Density:</li> <li>Relative density</li> <li>Vapor density</li> </ul>	Not determined. Not determined. Not determined.
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<ul> <li>Evaporation rate</li> </ul>	Not determined.	
<ul> <li>Solubility in / Miscibility with Water:</li> </ul>	Not miscible or difficult to mix.	
· Partition coefficient (n-octand	ol/water): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Solids content:	> 99 %	
<ul> <li>Other information</li> </ul>	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:
- Primary irritant effect:
- · on the skin:

Direct contact with product may cause mild skin irritation If heated, product can cause thermal burns.

- on the eye: May cause minor irritation on eye contact.
- 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)

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.
- 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

Non-hazardous for transport
Non-hazardous for transport
Non-hazardous for transport
Non-hazardous for transport Miscellaneous dangerous substances and articles
Non-hazardous for transport
Not applicable.
Not applicable.

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<ul> <li>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> <li>Not applicable.</li> </ul>		
· UN "Model Regulation":	Non-hazardous for transport	

### 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.
- · TSCA (Toxic Substances Control Act):
- 68413-24-1 Cashew, nutshell liq., polymer with epichlorohydrin

#### Proposition 65

- · Chemicals known to cause cancer:
- None of the ingredients is listed.
- $\cdot$  Chemicals known to cause reproductive toxicity for females:
- None of the ingredients is listed.
- $\cdot$  Chemicals known to cause reproductive toxicity for males:
- None of the ingredients is listed.
- · Chemicals known to cause developmental toxicity:
- None of the ingredients is listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency)
- None of the ingredients is listed.
- · TLV (Threshold Limit Value established by ACGIH)
- None of the ingredients is listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health)
- None of the ingredients is listed.

#### · GHS label elements

The product 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
- Hazard statements H317 May cause an allergic skin reaction.



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- Precautionary statements
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P280 Wear protective gloves.

P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse.

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

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 08/06/2017 / 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 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) 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** Skin Sens. 1: Skin sensitisation - Category 1