

Page 1/12

Safety Data Sheet acc. to OSHA HCS

Printing date 11/21/2023

Version 1

Reviewed on 11/21/2023

Identification		
· Product identifier		
· Product Description: Epox	y Curing Agent	
Product code: Cardolite NX Application of the substan		
• Details of the supplier of the • Manufacturer/Supplier: Cardolite Corporation 140 Wharton Road Bristol, PA 19007 United States Tel: 1-800-322-7365 Regulatory@cardolite.com	ie safety data sheet	
· Information department: P · Emergency telephone num	roduct safety department I ber: 24 Hour Emergency: 800-424-9300 CHE	MTREC
2 Hazard(s) identificatio	n	
· Classification of the subst	ance or mixture	
GHS08 Health haz	ard	
Toxic to Reproduction 2	H361 Suspected of damaging fertility or the un	nborn child.
GHS05 Corrosion		
Skin Corrosion 1B	H314 Causes severe skin burns and eye dam	age.
Eye Damage 1	H318 Causes serious eye damage.	-
GHS07		
Acute Toxicity - Inhalation 4 Sensitization - Skin 1	H332 Harmful if inhaled. H317 May cause an allergic skin reaction.	
Flammable Liquids 4	H227 Combustible liquid.	
· Label elements · GHS label elements	l labeled according to the Globally Harmonized	l System (GHS).



Page 2/12

Safety Data Sheet acc. to OSHA HCS

Printing date 11/21/2023 Version 1 Reviewed on 11/21/2023 Product Description: Epoxy Curing Agent (Contd. of page 1) · Signal word Danger · Hazard-determining components of labeling: Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled m-Phenylenebis(methylamine) Salicylic acid 2-methylpentane-1,5-diamine 2,4,6-Tris(Dimethylaminomethyl)Phenol · Hazard statements H227 Combustible liquid. H332 Harmful if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H361 Suspected of damaging fertility or the unborn child. · Precautionary statements P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+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. P310 Specific treatment (see on this label). P321 P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. · Classification system: · NFPA ratings (scale 0 - 4) Health = 3Fire = 2Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH *3 Health = *3FIRE 2 Fire = 2Reactivity = 0 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:		
8007-24-7 Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled Eye Damage 1, H318; Acute Toxicity - Dermal 4, H312; Skin Irritation 2, H315; Sensitization - Skin 1A, H317	< 25.0%	
(Cont	4 00 0000 0	

(Contd. on page 3)

⁻ US



Page 3/12

Safety Data Sheet acc. to OSHA HCS

Printing date 11/21/2023

Version 1

Reviewed on 11/21/2023

Product Description: Epoxy Curing Agent

		td. of page 2)
1477-55-0	m-Phenylenebis(methylamine)	< 20.0%
	Skin Corrosion 1B, H314; Eye Damage 1, H318; Acute Toxicity - Oral 4, H302; Acute Toxicity - Inhalation 4, H332; Sensitization - Skin 1B, H317	-
15520-10-2	2-methylpentane-1,5-diamine	< 15.0%
	♦ Acute Toxicity - Inhalation 3, H331; ♦ Skin Corrosion 1B, H314; Eye Damage 1, H318; ♦ Acute Toxicity - Oral 4, H302; Flammable Liquids 4, H227	-
69-72-7	Salicylic acid	< 8.0%
	Toxic to Reproduction 2, H361; 🔶 Eye Damage 1, H318; 🚸 Acute Toxicity - Oral 4, H302	-
90-72-2	2,4,6-Tris(Dimethylaminomethyl)Phenol	< 5.0%
	Skin Corrosion 1B, H314; Acute Toxicity - Dermal 4, H312; Sensitization - Skin 1B, H317	-

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.
- After swallowing: 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 During heating or in case of fire poisonous gases are produced.
- 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: Mouth respiratory protective device.

(Contd. on page 4)

US



Page 4/12

Safety Data Sheet acc. to OSHA HCS

Printing date 11/21/2023

Version 1

Reviewed on 11/21/2023

Product Description: Epoxy Curing Agent

(Contd. of page 3)

6 Accidental release measures

 Personal precautions, protective equipment and emergency procedures Mount respiratory protective device. 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:
None of the ingredients is listed.
· PAC-2:
None of the ingredients is listed.
· PAC-3:
None of the ingredients is listed.

7 Handling and storage

- · Handling:
- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
 Open and handle receptacle with care.
 Prevent formation of aerosols.
 Information about protection against explosions are
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Keep respiratory protective device available.
- 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.

(Contd. on page 5)

US



(Contd. of page 4)

Safety Data Sheet acc. to OSHA HCS

Printing date 11/21/2023

Version 1

Reviewed on 11/21/2023

Product Description: Epoxy Curing Agent

- 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

Use local exhaust ventilation. Suitable respiratory equipment should be used in cases of insufficient ventilation.

- · 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. Store protective clothing separately. 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

(Contd. on page 6)



Safety Data Sheet acc. to OSHA HCS

Printing date 11/21/2023

Version 1

Reviewed on 11/21/2023

Product Description: Epoxy Curing Agent

(Contd. of page 5)

9 Physical and chemical properties		
 Information on basic physical and chemical properties General Information Appearance: 		
Form:	Liquid	
Color:	Light yellow	
· Odor: · Odor threshold:	Amine-like Not determined.	
· pH-value:	Not determined.	
	Not determined.	
 Change in condition Melting point/Melting range: 	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
· Flash point:	105 ℃ (221 ℉)	
· Flammability (solid, gaseous):	Not applicable.	
· 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 ℃ (77 °F):	1.02571 g/cm ³ (8.56 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	ter): Not determined.	
· Viscosity:		
Dynamic at 25 ℃ (77 °F):	640 cps	
Kinematic:	Not determined.	
 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 7)

⁻ ÚS



Page 7/12

(Contd. of page 6)

Safety Data Sheet acc. to OSHA HCS

Version 1

Reviewed on 11/21/2023

Product Description: Epoxy Curing Agent

Printing date 11/21/2023

· 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

	TUXICUI	gicarin	TOTTIALION	
			cological effects	
	• Acute tox • LD/LC50 v		t are relevant for classification:	
	Irritating to			
	8007-24-7	Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled	
	Oral	LD50	>2,000 mg/kg (rat)	
	Dermal	LD50	2,000 mg/kg (rat)	
	1477-55-0	m-Pheny	lenebis(methylamine)	
		LD50	1,040 mg/kg (rat)	
			2.4 mg/l (rat)	
		•	Ipentane-1,5-diamine	
Oral LD50 1,690 mg/kg (rat)				
	69-72-7 Sa	-		
	Oral LD50 891 mg/kg (rat)			
	90-72-2 2,4,6-Tris(Dimethylaminomethyl)Phenol			
Oral LD50 2,169 mg/kg (rat)				
	Dermal	LD50	1,260 mg/kg (rabbit)	
	Primary in			
			effect on skin and mucous membranes.	
	• on the eye: Strong caustic effect.			
			e danger of severe eye injury.	
			itization possible through skin contact.	
			gical information:	
	preparatio	ICT SHOWS	the following dangers according to internally approved calculation methods for	
	Harmful	113.		
	Corrosive			
	Irritant		the second s	
	Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.			
	Carcinoge	•		
	•		Agency for Research on Cancer)	
		•	nts is listed.	
	•		cology Program)	
	None of th	e ingredie	nts is listed.	
			(Contd. on page 8)	



Page 8/12

(Contd. of page 7)

Safety Data Sheet acc. to OSHA HCS

Version 1

Reviewed on 11/21/2023

Product Description: Epoxy Curing Agent

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

· Aquatic toxicity:

Printing date 11/21/2023

8007-24-7 Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled

EC50 1,300 mg/l (Algae)

LL50 1,000 mg/l (Fish)

- 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 2 (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized. Danger to drinking water if even small quantities leak into the ground.

· 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

(Contd. on page 9)

119



Page 9/12

Safety Data Sheet acc. to OSHA HCS

Version 1

Reviewed on 11/21/2023

Product Description: Epoxy Curing Agent

Printing date 11/21/2023

	(Contd. of pag
 UN proper shipping name DOT 	Amines, liquid, corrosive, n.o.s. (r Phenylenebis(methylamine), 2-methylpentane-1
· ADR	diamine) 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Phenylenebis(methylamine), 2-methylpentane-1, diamine)
· IMDG, IATA	AMINES, LIQUID, CORROSIVE, N.O.S. (1 Phenylenebis(methylamine), 2-methylpentane-1, diamine)
· Transport hazard class(es)	
· DOT	
CORROSIVE 7	
· Class · Label	8 Corrosive substances 8
ADR	
· Class	8 Corrosive substances Miscellaneous dangerous substances and articles
· Label	8
· IMDG, IATA	
Class Label	8 Corrosive substances 8
· Packing group · DOT, ADR, IMDG, IATA	111
· Environmental hazards: · Marine pollutant:	No
 Special precautions for user Hazard identification number (Kemler code): 	
· EMS Number: · Stowage Category	F-A,S-B B
	(Contd. on page



Safety Data Sheet acc. to OSHA HCS

Version 1

Reviewed on 11/21/2023

Product Description: Epoxy Curing Agent

Printing date 11/21/2023

	(Contd. of page 9
· Stowage Code	SW2 Clear of living quarters.
 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	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. (M P H E N Y L E N E B I S (M E T H Y L A M I N E) , 2 METHYLPENTANE-1,5-DIAMINE), 8, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

None of the ingredients is listed.	
Section 313 (Specific toxic chemical listings):	
None of the ingredients is listed.	
TSCA (Toxic Substances Control Act):	
All components have the value ACTIVE.	
Hazardous Air Pollutants	
None of the ingredients is listed.	
Proposition 65	
Chemicals known to cause cancer:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	



Page 11/12

Safety Data Sheet acc. to OSHA HCS

Printing date 11/21/2023 Version 1 Reviewed on 11/21/2023 Product Description: Epoxy Curing Agent (Contd. of page 10) · 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) 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 GHS05 GHS07 GHS08 · Signal word Danger · Hazard-determining components of labeling: Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled m-Phenylenebis(methylamine) Salicylic acid 2-methylpentane-1,5-diamine 2,4,6-Tris(Dimethylaminomethyl)Phenol Hazard statements H227 Combustible liquid. H332 Harmful if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H361 Suspected of damaging fertility or the unborn child. **Precautionary statements** P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a poison center/doctor. Specific treatment (see on this label). P321 P405 Store locked up. Dispose of contents/container in accordance with local/regional/national/international P501 regulations. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out. US (Contd. on page 12)



Safety Data Sheet acc. to OSHA HCS

Printing date 11/21/2023

Version 1

Reviewed on 11/21/2023

Product Description: Epoxy Curing Agent

(Contd. of page 11)

Other information	adaa. Hawayar, thia aball not constitute a sucrestee
any specific product features and shall not estab	edge. However, this shall not constitute a guarantee lish a legally valid contractual relationship.
Department issuing SDS: Product safety department	rtment
Contact: Mr Eleazar dela Cruz	
Date of preparation / last revision 11/21/2023	
Abbreviations and acronyms:	
	diago denserveuses per reute (European Agreement Canastring
International Carriage of Dangerous Goods by Road)	dises dangereuses par route (European Agreement Concerning
IMDG: International Maritime Code for Dangerous Goods	
DOT: US Department of Transportation	
IATA: International Air Transport Association	
EINECS: European Inventory of Existing Commercial Chem	ical 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	
Flammable Liquids 4: Flammable liquids – Category 4	
Acute Toxicity - Dermal 4: Acute toxicity – Category 4	
Acute Toxicity - Inhalation 3: Acute toxicity - Category 3	
Skin Corrosion 1B: Skin corrosion/irritation – Category 1B	
Skin Irritation 2: Skin corrosion/irritation – Category 2	
Eye Damage 1: Serious eye damage/eye irritation - Catego	ry 1
Sensitization - Skin 1: Skin sensitisation – Category 1	
Sensitization - Skin 1A: Skin sensitisation – Category 1A	
Sensitization - Skin 1B: Skin sensitisation - Category 1B	
Toxic to Reproduction 2: Reproductive toxicity – Category 2	