



Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

SECTION 1: Identification of the substance/mixture and of the company undertaking

- · 1.1 Product identifier
- · Trade name: Epoxy Curing Agent
- · Article number: Cardolite NX-5660
- · **UFI:** XXT0-000T-J00V-MJP8
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- · Product category PC9a Coatings and paints, thinners, paint removers
- · Application of the substance / the mixture Coating
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

CARDOLITE SPECIALTY CHEMICALS EUROPE N.V.

Wijmenstraat 21 K , Bus 2 9030 Mariakerke – Gent

Tel.: +32 9 265.88.26 (Belgium) Fax.: +32 9 265.88.24 (Belgium) regulatory@cardolite.com eumsds@cardolite.com

- · Further information obtainable from: Product safety department
- · 1.4 Emergency telephone number:

24 Hour Emergency: 800-424-9300 CHEMTREC During business hours: +32 9 265.88.26 (Belgium)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Repr. 2 H361d Suspected of damaging the unborn child.



GHS05 corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



Acute Tox. 4 H332 Harmful if inhaled.

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

(Contd. on page 2)





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

(Contd. of page 1)

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms







GHS05 GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labelling:

Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled

m-Phenylenebis(methylamine)

Salicylic acid

2-methylpentane-1.5-diamine

Hazard statements

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or 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.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

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

regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

- PBT: Not applicable.vPvB: Not applicable.
- · Determination of endocrine-disrupting properties

69-72-7 Salicylic acid

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · **Description**: Mixture of substances listed below with nonhazardous additions.

(Contd. on page 3)

List II, III





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

Dangerous components:		
CAS: 8007-24-7 EC number: 700-991-6 Reg.nr.: 01-2119502450-57-0000	Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled Eye Dam. 1, H318; Acute Tox. 4, H312; Skin Irrit. 2, H315; Skin Sens. 1A, H317	< 25.0%
CAS: 1477-55-0 EINECS: 216-032-5 Reg.nr.: 01-2119480150-50-0000	m-Phenylenebis(methylamine) Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317; Aquatic Chronic 3, H412	< 20.0%
CAS: 15520-10-2 EINECS: 239-556-6	2-methylpentane-1,5-diamine Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H332	< 15.0%
CAS: 69-72-7 EINECS: 200-712-3 Index number: 607-732-00-5 Reg.nr.: 01-2119486984-17-xxxx	Salicylic acid ❖ Repr. 2, H361d; ❖ Eye Dam. 1, H318; ❖ Acute Tox. 4, H302	< 8.0%
CAS: 90-72-2 EINECS: 202-013-9 Index number: 603-069-00-0 Reg.nr.: 01-2119560597-27-0008	2,4,6-Tris(Dimethylaminomethyl)Phenol Skin Corr. 1B, H314; Aquatic Chronic 3, H412	< 5.0%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 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.

No further relevant information available.

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 plenty of water and provide fresh air. Call for a doctor immediately.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

(Contd. on page 4)

ΕU





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

(Contd. of page 3)

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

· 5.3 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.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

6.4 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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- Information about fire and explosion protection: Keep respiratory protective device available.
- · 7.2 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 container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

EU -





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

(Contd. of page 4)

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

Ingredients 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.

· DNELs					
8007-24-7	8007-24-7 Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled				
Oral	DNEL	0.25 mg/kg/day (General Population)			
Dermal	DNEL	0.25 mg/kg/day (General Population)			
		0.5 mg/kg/day (Workers)			
Inhalative	DNEL	0.2 mg/m3 (General Population)			
		0.88 mg/m3 (Workers)			

· PNECs

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

PNEC 3 µg/I (Aqua (freshwater))

30 µg/l (Aqua (intermittent release))

PNEC 10 mg/kg (Oral)

0.97 mg/kg (Sediment (freshwater))

0.088 mg/kg (Sediment (marine water))

6.71 mg/kg (Soil)

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

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

- Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as 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.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection



Protective gloves

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

(Contd. on page 6)





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

(Contd. of page 5)

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/face protection



Tightly sealed goggles

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

· Physical state Fluid

· Colour: Light yellow · Odour: Amine-like

· Odour threshold: Not determined.

• Melting point/freezing point: Undetermined.

· Boiling point or initial boiling point and boiling

range Undetermined.
• Flammability Not applicable.

Lower and upper explosion limit

Lower: Not determined.Upper: Not determined.

· Flash point: 105 ℃

• Decomposition temperature: Not determined. • pH Not determined.

Viscosity:

· Kinematic viscosity Not determined.

• **Dynamic at 25 ℃:** 640 cps

· Solubility

· water: Not miscible or difficult to mix.

· Partition coefficient n-octanol/water (log value) Not determined.

· Vapour pressure: Not determined.

Density and/or relative density

• **Density at 25 °C:** 1.02571 g/cm³

(Contd. on page 7)





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

(Contd. of page 6)

· Relative density Not determined. · Vapour density Not determined.

· 9.2 Other information

· Appearance:

· Form: Liquid

· Important information on protection of health

and environment, and on safety.

 Auto-ignition temperature: Product is not selfigniting.

 Explosive properties: Product does not present an explosion hazard.

No data available.

· Change in condition

· Evaporation rate Not determined.

· Information with regard to physical hazard

classes

 Explosives No data available. · Flammable gases No data available. · Aerosols No data available. Oxidising gases No data available. · Gases under pressure No data available. · Flammable liquids No data available. · Flammable solids No data available. · Self-reactive substances and mixtures No data available. · Pyrophoric liquids No data available. · Pyrophoric solids No data available.

Self-heating substances and mixtures · Substances and mixtures, which emit

flammable gases in contact with water No data available. · Oxidising liquids No data available. Oxidising solids No data available. Organic peroxides No data available. · Corrosive to metals No data available. Desensitised explosives No data available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability Product is stable.
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

(Contd. of page 7)

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Harmful if inhaled.
- · LD/LC50 values relevant for classification:

Irritating to eyes and skin.

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)
Oral	LD50	1,040 mg/kg (rat)
Inhalative	LC50/4 h	2.4 mg/l (rat)
15520-10-	2 2-methy	lpentane-1,5-diamine
Oral	LD50	1,690 mg/kg (rat)
69-72-7 S	alicylic ac	id
Oral	LD50	891 mg/kg (rat)
90-72-2 2,	4,6-Tris(D	imethylaminomethyl)Phenol
Oral	LD50	2,169 mg/kg (rat)
Dermal	LD50	1,260 mg/kg (rabbit)

- · Skin corrosion/irritation Causes severe skin burns and eye damage.
- · Serious eye damage/irritation Causes serious eye damage.
- · Respiratory or skin sensitisation May cause an allergic skin reaction.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Suspected of damaging the unborn child.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

69-72-7 Salicylic acid

List II, III

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity:

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

EC50 1,300 mg/l (Algae)

- LL50 1,000 mg/l (Fish)
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.

(Contd. on page 9)





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

(Contd. of page 8)

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport informa	tion
· 14.1 UN number or ID number · ADR, IMDG, IATA	UN2735
· 14.2 UN proper shipping name · ADR · IMDG, IATA	2735 AMINES, LIQUID, CORROSIVE, N.O.S. (m Phenylenebis(methylamine), 2-methylpentane-1,5 diamine) AMINES, LIQUID, CORROSIVE, N.O.S. (m Phenylenebis(methylamine), 2-methylpentane-1,5 diamine)
· 14.3 Transport hazard class(es) · ADR	
Class	8 Corrosive substances. Miscellaneous dangerous substances and articles.
	(Contd. on page 1





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

Labat	(Contd. of page
Label	8
IMDG, IATA	
Class Label	8 Corrosive substances. 8
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category Stowage Code	Warning: Corrosive substances. 80 F-A,S-B B SW2 Clear of living quarters.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
Transport/Additional information:	
ADR 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
Transport category Tunnel restriction code	3 E
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. (MPHENYLENEBIS (METHYLAMINE), 2 METHYLPENTANE-1,5-DIAMINE), 8, III

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to Regulation (EC) No 1272/2008

 The product is classified and labelled according to the CLP regulation.

(Contd. on page 11)





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

(Contd. of page 10)

· Hazard pictograms







GHS05 GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labelling:

Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled

m-Phenylenebis(methylamine)

Salicylic acid

2-methylpentane-1,5-diamine

Hazard statements

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or 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.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

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

regulations.

· Directive 2012/18/EU

- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

(Contd. on page 12)





Printing date 21.11.2023 Version number 1 Revision: 21.11.2023

Trade name: Epoxy Curing Agent

(Contd. of page 11)

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

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

SECTION 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.

Relevant phrases

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eve damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H361d Suspected of damaging the unborn child.
- H412 Harmful to aquatic life with long lasting effects.
- Department issuing SDS: Product safety department
- · Contact: Mr Eleazar dela Cruz
- · Date of previous version: 17.11.2023
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Skin Sens. 1: Skin sensitisation - Category 1 Skin Sens. 1A: Skin sensitisation - Category 1A

Repr. 2: Reproductive toxicity - Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

FΠ