

Printing date 02.11.2017

Version number 2

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

- · 1.1 Product identifier
- · Trade name: Epoxy Curing Agent
- · Article number: Cardolite NT-5901
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- · 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: 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

GHS05 corrosion

Skin Corr. 1BH314 Causes severe skin burns and eye damage.Eye Dam. 1H318 Causes serious eye damage.

GHS07

•	
Acute Tox. 4	H302 Harmful if swallowed.
Skin Sens. 1	H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 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



· Signal word Danger

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Hazard-det	ermining components of labelling:
Benzyl Alcol	
3-Aminomet	thyl-3,5,5-Trimethylcyclohexylamine
Hazard stat	ements
H302 Harm	ful if swallowed.
H314 Cause	es severe skin burns and eye damage.
H317 May c	ause an allergic skin reaction.
H412 Harmi	ful to aquatic life with long lasting effects.
Precaution	ary statements
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P260	
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 contac lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/internationa regulations.
2.3 Other h	azards
Results of	PBT and vPvB assessment
PBT: Not ap	oplicable.
'	

• vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

Dangerous components.		
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5	Benzyl Alcohol Acute Tox. 4, H302; Acute Tox. 4, H332	> 40.0%
CAS: 2855-13-2 EINECS: 220-666-8 Index number: 612-067-00-9	3-Aminomethyl-3,5,5-Trimethylcyclohexylamine Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	< 30.0%
A didition of the former attacks at		

· 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.

In case of unconsciousness place patient stably in side position for transportation.

• After skin contact: Immediately wash with water and soap and rinse thoroughly.

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- (Contd. of page 2) • After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor. • After swallowing:
- Call for a doctor immediately.
- 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** No further relevant information available.

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 No further relevant information available.
- 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 Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. 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. Prevent formation of aerosols.

· Information about fire - and explosion protection: No special measures required.

· 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.

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· 7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 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.

- Additional information: The lists valid during the making were used as basis.
- · 8.2 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 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.

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

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SECTION 9: Physical and chemi	cal properties			
 9.1 Information on basic physical and chemical properties General Information 				
· Appearance:				
Form:	Liquid			
Colour:	Dark orange colour			
· Odour:	Amine-like			
· Odour threshold:	Not determined.			
· pH-value at 25 ℃:	9			
Change in condition				
Melting point/freezing point:	Undetermined.			
Initial boiling point and boiling range	:: 205 ℃			
· Flash point:	96 ℃			
· Flammability (solid, gas):	Not applicable.			
· Ignition temperature:				
Decomposition temperature:	Not determined.			
· Auto-ignition temperature:	Product is not selfigniting.			
· Explosive properties:	Product does not present an explosion hazard.			
· Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
· Vapour pressure:	Not determined.			
· Density at 25 °C:	0.99696 g/cm ³			
· Relative density	Not determined.			
· Vapour 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:	Not determined.			
Kinematic:	Not determined.			
 9.2 Other information 	No further relevant information available.			

SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

- 10.2 Chemical stability Product is stable.
- \cdot 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.

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SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

- · Acute toxicity
- Harmful if swallowed.
- LD/LC50 values relevant for classification:
- Irritating to eyes and skin.

100-51-6 Benzyl Alcohol

- Oral LD50 1230 mg/kg (rat)
- Dermal LD50 2000 mg/kg (rabbit)
- · Primary irritant effect:
- 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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 Based on available data, the classification criteria are not met.
- 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.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 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.
- Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (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.

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

- Harmful to aquatic organisms
- 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

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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 informati	on
· 14.1 UN-Number · ADR, IMDG, IATA	UN2735
 14.2 UN proper shipping name ADR 	2735 AMINES, LIQUID, CORROSIVE, N.O.S (ISOPHORONEDIAMINE)
· IMDG, IATA	ÀMINES, LIQUID, CORROSIVE, N.O.S (ISOPHORONEDIAMINE)
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class · Label	8 Corrosive substances. 8
 14.4 Packing group ADR, IMDG, IATA 	111
 14.5 Environmental hazards: Marine pollutant: 	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
 Danger code (Kemler): EMS Number: 	80 F-A,S-B
· Segregation groups	Alkalis
· 14.7 Transport in bulk according to Ann	
Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	-
 Limited quantities (LQ) Excepted quantities (EQ) 	5L Code: E1
Excepted quantities (EQ)	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
 Transport category Tunnel restriction code 	3 E
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 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. (ISOPHORONEDIAMINE), 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.
- Hazard pictograms



· Signal word Danger

• Hazard-determining components of labelling: Benzyl Alcohol

3-Aminomethyl-3,5,5-Trimethylcyclohexylamine

· Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.
- P260 Do not breathe dusts or mists.
- 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.
- 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
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information	
This information is based on our present knowledge. However, this shall not constitute a guarant any specific product features and shall not establish a legally valid contractual relationship.	ee for
 Relevant phrases H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H412 Harmful to aquatic life with long lasting effects. 	
 Department issuing SDS: Product safety department Contact: Mr Eleazar dela Cruz Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerninternational 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) VOC: Volatile Organic Compounds (USA, EU) LC50: 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 1 Skin Sens. 1: Skin sensitisation – Category 1 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3 	ing the