

EG160 High Temp Epoxy Tooling Gelcoat

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Compilation date: 24/05/2017

**Revision date:** 24/05/2017

Revision No: 1

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name: EG160 High Temp Epoxy Tooling Gelcoat

Product code: EP-G160

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Use of substance / mixture:** PC1: Adhesives, sealants. PC9a: Coatings and paints, thinners, paint removers. PC9b:

Fillers, putties, plasters, modelling clay. PC32: Polymer preparations and compounds. PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for

formulation of preparations\* and articles (multistage and/or significant contact)

PROC8a: Transfer of substance or preparation (charging/discharging) from/to

vessels/large containers at non-dedicated facilities PROC8b: Transfer of substance or

preparation (charging/discharging) from/to vessels/large containers at dedicated

preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated

filling line, including weighing) PROC10: Roller application or brushing PROC13: Treatment of articles by dipping and pouring PROC19: Hand-mixing with intimate contact and only PPE available ERC2: Formulation of preparations\* ERC3: Formulation in materials ERC5: Industrial use resulting in inclusion into or onto a matrix ERC6d:

Industrial use of process regulators for polymerisation processes in production of

resins, rubbers, polymers

# 1.3. Details of the supplier of the safety data sheet

Company name: Easy Composites Ltd

Unit 39, Park Hall Business Village

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ST3 5XA

United Kingdom

**Tel:** +44 (0) 1782 454499 **Fax:** +44 (0) 1782 596868

Email: sales@easycomposites.co.uk

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### 1.4. Emergency telephone number

Emergency tel: +44 (0) 1782 454499

(office hours only)

### Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification under CLP: Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317

Most important adverse effects: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

Toxic to aquatic life with long lasting effects.

# 2.2. Label elements

Label elements:

Hazard statements: H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS07: Exclamation mark

GHS09: Environmental





Signal words: Warning

Precautionary statements: P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+352: IF ON SKIN: Wash with plenty of water/.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P321: Specific treatment (see instructions on this label).

### 2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

# Section 3: Composition/information on ingredients

### 3.2. Mixtures

**Hazardous ingredients:** 

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# BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}

EINECS	CAS	PBT / WEL	CLP Classification	Percent
500-033-5	25068-38-6	-	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317; Aquatic Chronic 2: H411	1-25%
1,3-PROPANE	DIOL, 2,2-BIS(HY	DROXYMETHYL)-, POLYMER WI	ITH 2-(CHLOROMETHYL)OXRIANE	
608-564-5	30973-88-7	-	Skin Irrit. 2: H315; Eye Irrit. 2: H319; Skin Sens. 1: H317	1-25%
N,N,N',N'-TETF	RAGLYCIDYL-4,4'-	-DIAMINO DIPHENYL METHANE		
249-204-3	28768-32-3	-	Aquatic Chronic 2: H411; Skin Sens. 1: H317	1-25%
	DIOL, 2-ETHYL-2- LPROPANE TRIGI	,	R WITH (CHLOROMETHYL)OXIRANE -	
608-489-8	30499-70-8	-	Skin Irrit. 2: H315; Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Skin Sens. 1: H317	1-25%
PHENOL, POL	YMER WITH FOR	RMALDEHYDE, GLYCIDYL ETHER	₹	
-	28064-14-4	-	Skin Irrit. 2: H315; Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Sens. 1: H317	1-25%
N,N-DIGLYCIC	YL ANILINE			
	2095-06-9		Acute Tox. 4: H302; Skin Irrit. 2: H315;	1-25%

### Section 4: First aid measures

### 4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash

Skin Sens. 1: H317; Eye Irrit. 2: H319;

STOT SE 3: H335

immediately with plenty of soap and water. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Consult a doctor.

# 4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. Exposure may

cause coughing or wheezing.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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### 4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Show this safety data sheet to the doctor in attendance.

### Section 5: Fire-fighting measures

### 5.1. Extinguishing media

Extinguishing media: Water spray. Water foq. Dry chemical powder. Carbon dioxide. Alcohol or polymer foam.

Alcohol resistant foam.

### 5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact

with skin and eyes.

#### Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised

personnel. Refer to section 8 of SDS for personal protection details.

### 6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

#### 6.3. Methods and material for containment and cleaning up

Clean-up procedures: Mix with sand or vermiculite. Transfer to a closable, labelled salvage container for

disposal by an appropriate method.

#### 6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

# Section 7: Handling and storage

### 7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area.

Suitable packaging: Must only be kept in original packaging.

#### 7.3. Specific end use(s)

Specific end use(s): No data available.

### Section 8: Exposure controls/personal protection

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### 8.1. Control parameters

Workplace exposure limits: No data available.

**DNEL/PNEC Values** 

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.Eye protection: Safety glasses.Skin protection: Protective clothing.

### Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

State: Liquid
Colour: Grey

Odour: Characteristic odour

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: Highly viscous

Boiling point/range°C: No data available. Melting point/range°C: No data available.

Flammability limits %: lower: No data available. upper: No data available.

Flash point°C: No data available. Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available. Vapour pressure: No data available.

**Relative density:** 1.13 - 1.18 **pH:** No data available.

VOC g/I: No data available.

# 9.2. Other information

Other information: No data available.

# Section 10: Stability and reactivity

# 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

# 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Hazardous reactions: Polymerisation may occur on exposure to conditions or materials listed below.

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# 10.4. Conditions to avoid

Conditions to avoid: Heat.

# 10.5. Incompatible materials

Materials to avoid: Amines.

# 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

# **Section 11: Toxicological information**

# 11.1. Information on toxicological effects

# **Hazardous ingredients:**

# **BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}**

ORL	MUS	LD50	15600	mg/kg
ORL	RAT	LD50	11400	mg/kg
SKN	RBT	LD50	>20	ml/kg

# N,N,N',N'-TETRAGLYCIDYL-4,4'-DIAMINO DIPHENYL METHANE

DERMAL	RBT	LD50	>3000	mg/kg
DUST/MIST	RAT	4H LC50	>30	mg/m3
ORAL	MUS	LD50	>5000	mg/kg

# 1,3-PROPANEDIOL, 2-ETHYL-2-(HYDROXYMETHYL)-, POLYMER WITH (CHLOROMETHYL)OXIRANE - TRIMETHYLOLPROPANE TRIGLYCIDYLETHER

RAT RAT	LD50	>2001	mg/kg
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# PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	RAT	LD50	>2001	mg/kg
VAPOURS	RAT	5H LC0	0.00001	ppm

# N,N-DIGLYCIDYL ANILINE

DERMAL	RBT	LD50	3560	mg/kg
ORAL	RAT	LD50	>1620	mg/kg

# Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated

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Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	DRM	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness.Ingestion: Nausea and stomach pain may occur.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

# **Section 12: Ecological information**

# 12.1. Toxicity

### **Hazardous ingredients:**

# 1,3-PROPANEDIOL, 2,2-BIS(HYDROXYMETHYL)-, POLYMER WITH 2-(CHLOROMETHYL)OXRIANE

Golden Orfe (Leuciscus idus)	96H LC50	460	mg/l
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# N,N,N',N'-TETRAGLYCIDYL-4,4'-DIAMINO DIPHENYL METHANE

AQUATIC PLANT	96H ErC50	38.234	mg/l
CRUSTACEA	48h LC50	14.682	mg/l
FISH	96H LC50	2.454	mg/l

# 1,3-PROPANEDIOL, 2-ETHYL-2-(HYDROXYMETHYL)-, POLYMER WITH (CHLOROMETHYL)OXIRANE - TRIMETHYLOLPROPANE TRIMETHYLOLPROPANE

FISH	96H LC0	56	mg/l
FISH	96H LC50	75	mg/l

### PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER

ALGAE	72H EC50	9.4	mg/l
BACTERIA	3H IC50	>100	mg/l
DAPHNIA	21D Semi Static NOEC	0.3	mg/l
DAPHNIA	48H EC50	1.7	mg/l
FISH	96H LC50	1.5	mg/l

# 12.2. Persistence and degradability

Persistence and degradability: No data available.

# 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

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12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

### Section 13: Disposal considerations

### 13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal

company.

**Disposal of packaging:** Arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national

regulations regarding disposal.

# **Section 14: Transport information**

#### 14.1. UN number

UN number: UN3082

# 14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Epoxy Resin)

# 14.3. Transport hazard class(es)

Transport class: 9

# 14.4. Packing group

Packing group: III

# 14.5. Environmental hazards

Environmentally hazardous: Yes Marine pollutant: Yes

# 14.6. Special precautions for user

Tunnel code: E

Transport category: 3

# **Section 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: Not applicable.

### 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture

by the supplier.

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# **Section 16: Other information**

### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No

2015/830.

\* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive

and shall be used only as a guide. This company shall not be held liable for any

damage resulting from handling or from contact with the above product.



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Compilation date: 24/05/2017

Revision date: 24/05/2017

Revision No: 1

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name: EG160 High Temp Epoxy Tooling Gelcoat Hardener

Product code: EP-G160

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: PC1: Adhesives, sealants. PC9a: Coatings and paints, thinners, paint removers. PC9b:

Fillers, putties, plasters, modelling clay. PC32: Polymer preparations and compounds. PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for

formulation of preparations\* and articles (multistage and/or significant contact)

PROC8a: Transfer of substance or preparation (charging/discharging) from/to

vessels/large containers at non-dedicated facilities PROC8b: Transfer of substance or

preparation (charging/discharging) from/to vessels/large containers at dedicated

facilities PROC9: Transfer of substance or preparation into small containers (dedicated

filling line, including weighing) PROC10: Roller application or brushing PROC13: Treatment of articles by dipping and pouring PROC19: Hand-mixing with intimate contact and only PPE available ERC2: Formulation of preparations\* ERC3: Formulation in materials ERC5: Industrial use resulting in inclusion into or onto a matrix ERC6d:

Industrial use of process regulators for polymerisation processes in production of

resins, rubbers, polymers

# 1.3. Details of the supplier of the safety data sheet

Company name: Easy Composites Ltd

Unit 39, Park Hall Business Village

Longton, Stoke on Trent

Staffordshire

ST3 5XA

United Kingdom

**Tel:** +44 (0) 1782 454499

Fax: +44 (0) 1782 596868

Email: sales@easycomposites.co.uk

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### 1.4. Emergency telephone number

Emergency tel: +44 (0) 1782 454499

(office hours only)

#### **Section 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Classification under CLP: Skin Corr. 1B: H314; Skin Sens. 1: H317; STOT RE 2: H373; Acute Tox. 4: H302; Aquatic

Chronic 2: H411; -: EUH208

Most important adverse effects: Contains 3,6-diazaoctanethylenediamine. May produce an allergic reaction. Harmful if

swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure. Toxic

to aquatic life with long lasting effects.

#### 2.2. Label elements

Label elements:

Hazard statements: EUH208: Contains 3,6-diazaoctanethylenediamine. May produce an allergic reaction.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H373: May cause damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS05: Corrosion

GHS07: Exclamation mark GHS08: Health hazard

GHS09: Environmental









Signal words: Danger

Precautionary statements: P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+312: IF SWALLOWED: Call a if you feel unwell.

P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P302+352: IF ON SKIN: Wash with plenty of water/.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

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0.05-1%

# Section 3: Composition/information on ingredients

#### 3.2. Mixtures

### Hazardous ingredients:

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE - REACH registered number(s): 01-2119514687-32

EINECS	CAS	PBT / WEL	CLP Classification	Percent
220-666-8	2855-13-2	-	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412	25-50%
4,4 METHYLEN	NEBIS (CYCLOHE	XYLAMINE) - REACH registered	number(s): 01-2119541673-38	
217-168-8	1761-71-3	-	Acute Tox. 4: H302; Skin Corr. 1B: H314; STOT RE 2: H373; Eye Dam. 1: H318; Skin Sens. 1: H317	25-50%
2-ETHYL-4-ME	THYLIMIDAZOLE			
213-234-5	931-36-2	-	Acute Tox. 4: H302; Eye Dam. 1: H318	25-50%
FATTY ACIDS,	, C-18 UNSATD, T	RIMERS, REACTION PRODUCT	WITH TRIETHYLENE TETRAMINE	
605-297-6	162627-18-1	-	Skin Sens. 1B: H317; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	1-25%
3,6-DIAZAOCT	ANETHYLENEDIA	AMINE - REACH registered numb	per(s): 01-2119487919-13	

# Section 4: First aid measures

203-950-6

### 4.1. Description of first aid measures

112-24-3

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still

Acute Tox. 4: H312; Skin Corr. 1B:

H314; Skin Sens. 1: H317; Aquatic

Chronic 3: H412

on skin. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist

examination.

Ingestion: Do not induce vomiting. Wash out mouth with water. If conscious, give half a litre of water

to drink immediately. Transfer to hospital as soon as possible.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Remove casualty from

exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious, check for breathing and apply artificial respiration if

necessary. Consult a doctor.

# 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** Severe burns may occur. There may be irritation and redness at the site of contact.

Eye contact: There may be severe pain. Corneal burns may occur. May cause permanent damage.

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Ingestion: Corrosive burns may appear around the lips. There may be soreness and redness of

the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Show this safety data sheet to the doctor in attendance.

# Section 5: Fire-fighting measures

### 5.1. Extinguishing media

Extinguishing media: Carbon dioxide. Dry chemical powder. Alcohol or polymer foam. Water spray. Use water

spray to cool containers.

### 5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear protective clothing to prevent contact with skin and eyes. Wear self-contained

breathing apparatus.

#### Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Mark out the contaminated area

with signs and prevent access to unauthorised personnel. Turn leaking containers

leak-side up to prevent the escape of liquid.

# 6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

Clean-up procedures: Mix with sand or vermiculite. Clean-up should be dealt with only by qualified personnel

familiar with the specific substance. Transfer to a closable, labelled salvage container

for disposal by an appropriate method.

# 6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS, Refer to section 13 of SDS,

# Section 7: Handling and storage

### 7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

Do not handle in a confined space. Avoid the formation or spread of mists in the air.

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# 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Avoid incompatible materials and conditions - see section

10 of SDS.

Suitable packaging: Must only be kept in original packaging.

# 7.3. Specific end use(s)

Specific end use(s): No data available.

# Section 8: Exposure controls/personal protection

# 8.1. Control parameters

Workplace exposure limits: No data available.

# **DNEL/PNEC Values**

# **Hazardous ingredients:**

# 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	20.1 mg/m3	Workers	-
PNEC	Fresh water	0.06 mg/l	-	-
PNEC	Marine water	0.006 mg/l	-	-

### 3,6-DIAZAOCTANETHYLENEDIAMINE

_	_	.,,	5	
Туре	Exposure	Value	Population	Effect
DNEL	Dermal	0.57 mg/kg	Workers	Systemic
DNEL	Inhalation	1 mg/m3	Workers	Local
DNEL	Dermal	0.25 mg/kg	Consumers	Systemic
DNEL	Oral	0.41 mg/kg	Consumers	Systemic
DNEL	Inhalation	0.29 mg/m3	Consumers	Systemic
PNEC	Fresh water	0.19 mg/l	-	-
PNEC	Marine water	0.038 mg/l	-	-
PNEC	Fresh water sediments	95.9 mg/kg	-	-
PNEC	Marine sediments	19.2 mg/kg	-	-
PNEC	Soil (agricultural)	19.1 mg/kg	-	-
PNEC	Microorganisms in sewage treatment	4.25 mg/l	-	-

# 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Gas/vapour

filter, type K: ammonia and derivatives (EN141).

Hand protection: Impermeable gloves.

**Eye protection:** Safety glasses with side-shields. Ensure eye bath is to hand.

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Skin protection: Impermeable protective clothing.

Environmental: Ensure all engineering measures mentioned in section 7 of SDS are in place.

# Section 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Yellow-orange

Odour: Characteristic odour

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: 130 mPas (25°C)

Boiling point/range°C: No data available. Melting point/range°C: No data available.

Flammability limits %: lower: No data available. upper: No data available.

Flash point°C: No data available. Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available. Vapour pressure: No data available.

**Relative density:** 0.92 - 0.97 **pH:** No data available.

VOC g/I: No data available.

# 9.2. Other information

Other information: No data available.

### Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

# 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

# 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may generate enough heat and gases for fires/explosions.

Decomposition may occur on exposure to conditions or materials listed below.

### 10.4. Conditions to avoid

Conditions to avoid: Direct sunlight. Heat. Sources of ignition.

### 10.5. Incompatible materials

Materials to avoid: Acids. Oxidising agents. Metals.

### 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

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# **Section 11: Toxicological information**

# 11.1. Information on toxicological effects

### Hazardous ingredients:

### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

DERMAL	RBT	LD50	1840	mg/kg
ORAL	RAT	LD50	1030	mg/kg

### **4,4 METHYLENEBIS (CYCLOHEXYLAMINE)**

DERMAL	RBT	LD50	2110	mg/kg
ORAL	RAT	LD50	625	mg/kg

#### 2-ETHYL-4-METHYLIMIDAZOLE

ORAL	RAT	LD50	622	ma/ka

### 3,6-DIAZAOCTANETHYLENEDIAMINE

IVN	MUS	LD50	350	mg/kg
ORL	MUS	LD50	1600	mg/kg
ORL	RAT	LD50	2500	mg/kg

# Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	DRM	Hazardous: calculated
STOT-repeated exposure	-	Hazardous: calculated

# Symptoms / routes of exposure

Skin contact: Severe burns may occur. There may be irritation and redness at the site of contact.

**Eye contact:** There may be severe pain. Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. There may be soreness and redness of

the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

# **Section 12: Ecological information**

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# 12.1. Toxicity

### **Hazardous ingredients:**

### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

BACTERIA	15H EC10	1120	mg/l
Daphnia magna	48H EC50	23	mg/l
Scenedesmus Subspicatus	72H EC50	> 50	mg/l
ZEBRAFISH (Brachydanio rerio)	96H LC50	110	mg/l

### **4,4 METHYLENEBIS (CYCLOHEXYLAMINE)**

Daphnia magna	48H EC50	6.84	mg/l
Daphnia magna	504H NOEC	4	mg/l
GOLDEN ORFE (Leuciscus idus)	96H LC50	46 - 100	mg/l

### 2-ETHYL-4-METHYLIMIDAZOLE

Daphnia magna	48H EC50	30	mg/l
FISH	96H LD50	46 - 100	mg/l

# 3,6-DIAZAOCTANETHYLENEDIAMINE

Daphnia magna	48H EC50	10 - 100	mg/l
FATHEAD MINNOW (Pimephales promelas)	96H LC50	> 100	mg/l
GREEN ALGA (Selenastrum capricornutum)	72H ErC50	10 - 100	mg/l

# 12.2. Persistence and degradability

Persistence and degradability: No data available.

# 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

# 12.4. Mobility in soil

Mobility: No data available.

# 12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

# Section 13: Disposal considerations

# 13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal

company.

**Disposal of packaging:** Arrange for collection by specialised disposal company.

[cont...]

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**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

# **Section 14: Transport information**

#### 14.1. UN number

UN number: UN2735

# 14.2. UN proper shipping name

Shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(Contians: Aliphatic Amines; FATTY ACIDS, C-18 UNSATD, TRIMERS, REACTION

PRODUCT WITH TRIETHYLENE TETRAMINE)

### 14.3. Transport hazard class(es)

Transport class: 8

### 14.4. Packing group

Packing group: ||

#### 14.5. Environmental hazards

Environmentally hazardous: Yes Marine pollutant: Yes

# 14.6. Special precautions for user

Tunnel code: E
Transport category: 2

# **Section 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: Not applicable.

# 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture

by the supplier.

### **Section 16: Other information**

### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No

2015/830.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** EUH208: Contains <name of sensitising substance>. May produce an allergic reaction.

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.

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H318: Causes serious eye damage.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive

and shall be used only as a guide. This company shall not be held liable for any

damage resulting from handling or from contact with the above product.