

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 01/02/2023 Version: 9.0

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

#### 1.1. Product identifier

Trade name

Product code

Product form

: Mixture

: EMP160 High Temperature Epoxy Moulding Paste

: EMP160-A

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

#### 1.2.1. Relevant identified uses

Main use category Use of the substance/mixture : Industrial use,Professional use: Casting compound

#### 1.2.2. Uses advised against

No additional information available

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

Easy Composites Ltd Unit 39, Park Hall Business Village, Stoke on Trent, Staffordshire, ST3 5XA. United Kingdom.

#### Tel: +44 (0)1782 454499 -

sales@easycomposites.com

#### 1.4. Emergency telephone number

Emergency number

: +44 (0)1782 454499 (working hours only)

SECTION 2: Hazards identification	
2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Germ cell mutagenicity, Category 2	H341
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

Suspected of causing genetic defects. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/20	008 [CLP]
Hazard pictograms (CLP)	
	GHS05 GHS07 GHS08 GHS09
Signal word (CLP)	Danger
Contains	bis-[4-(2,3-epoxipropoxi)phenyl]propane; TGMDA, multifunctional epoxide; N,N-Diglycidyl aniline; 1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether
Hazard statements (CLP)	H315 - Causes skin irritation.
	H317 - May cause an allergic skin reaction.

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	H318 - Causes serious eye damage.
	H341 - Suspected of causing genetic defects.
	H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P201 - Obtain special instructions before use.
	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280 - Wear protective gloves, protective clothing, eye protection.
	P305+P351+P338+P310 - 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 or doctor.
	P321 - Specific treatment (see supplemental first aid instruction on this label).
	P391 - Collect spillage.

#### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

### SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
bis-[4-(2,3-epoxipropoxi)phenyl]propane	CAS-No.: 1675-54-3 EC-No.: 216-823-5 EC Index-No.: 603-073-00-2 REACH-no: 01-2119456619- 26	1 – 25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
TGMDA, multifunctional epoxide	CAS-No.: 28768-32-3 EC-No.: 249-204-3 REACH-no: 01-2119472303- 45	1 – 25	Skin Sens. 1, H317 Aquatic Chronic 2, H411
1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether	CAS-No.: 2425-79-8 EC-No.: 219-371-7 EC Index-No.: 603-072-00-7 REACH-no: 01-2119494060- 45	1 – 25	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
N,N-Diglycidyl aniline	CAS-No.: 2095-06-9 EC-No.: 218-259-5 REACH-no: 01-2120782027- 53	1 – 25	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 2, H341

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
bis-[4-(2,3-epoxipropoxi)phenyl]propane	CAS-No.: 1675-54-3 EC-No.: 216-823-5 EC Index-No.: 603-073-00-2 REACH-no: 01-2119456619- 26	( 5 ≤C ≤ 100) Eye Irrit. 2, H319 ( 5 ≤C ≤ 100) Skin Irrit. 2, H315	

Full text of H- and EUH-statements: see section 16

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SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effect	s, both acute and delayed
Symptoms/effects after skin contact Symptoms/effects after eye contact	<ul><li>Irritation. May cause an allergic skin reaction.</li><li>Serious damage to eyes.</li></ul>

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

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam.
5.2. Special hazards arising from the subst	tance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures			
6.1. Personal precautions, protectiv	ve equipment and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.</li> </ul>		
6.1.2. For emergency responders			
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			

Avoid release to the environment.

6.3. Methods and material for contain	ment and cleaning up
For containment Methods for cleaning up	<ul> <li>Collect spillage.</li> <li>Mechanically recover the product. Notify authorities if product enters sewers or public waters.</li> </ul>
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	

For further information refer to section 13.

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SECTION 7: Handling and storag	e
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	<ul> <li>Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.</li> <li>Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>
7.2. Conditions for safe storage, incl	uding any incompatibilities
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.

### 7.3. Specific end use(s)

No additional information available

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

**Eye protection:** Safety glasses

#### 8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Protective gloves

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#### 8.2.2.3. Respiratory protection

#### **Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

### **SECTION 9: Physical and chemical properties**

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

Physical state	:	Solid
Colour	:	Grey.
Odour	:	characteristic.
Odour threshold	:	No data available
рН	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non flammable.
Vapour pressure	:	No data available
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Density	:	1.2 – 1.3 g/cm <sup>3</sup> (25°C)
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	Not applicable

#### 9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability** 

Stable under normal conditions.

**10.3. Possibility of hazardous reactions** 

No dangerous reactions known under normal conditions of use.

#### **10.4. Conditions to avoid**

None under recommended storage and handling conditions (see section 7).

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### 10.5. Incompatible materials

### No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information	on		
11.1 Information on toxicological effects			
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified : Not classified : Not classified		
bis-[4-(2,3-epoxipropoxi)phenyl]propane	(1675-54-3)		
LD50 oral rat	<ul> <li>&gt; 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline</li> <li>420 (Acute Oral Toxicity - Fixed Dose Method)</li> </ul>		
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))		
LD50 dermal rabbit	20000 mg/kg		
TGMDA, multifunctional epoxide (28768-3	32-3)		
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)		
LD50 oral	> 5000 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity)		
LD50 dermal rabbit	> 3000 mg/kg bodyweight Animal: rabbit		
N,N-Diglycidyl aniline (2095-06-9)			
LD50 oral rat	1620 mg/kg		
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: other:		
1,4-bis(2,3 epoxypropoxy)butane; butane	dioldiglycidyl ether (2425-79-8)		
LD50 oral rat	1163 mg/kg		
LD50 dermal rat	> 2150 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:		
LD50 dermal rabbit	> 2150 mg/kg		
Skin corrosion/irritation	: Causes skin irritation.		
TGMDA, multifunctional epoxide (28768-3	32-3)		
рН	7.1 – 7.3 Temp.: 20 °C Concentration: (>=)10 mg/L		
Serious eye damage/irritation	: Causes serious eye damage.		
TGMDA, multifunctional epoxide (28768-3	32-3)		
рН	7.1 – 7.3 Temp.: 20 °C Concentration: (>=)10 mg/L		
Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	<ul> <li>May cause an allergic skin reaction.</li> <li>Suspected of causing genetic defects.</li> <li>Not classified</li> </ul>		
bis-[4-(2,3-epoxipropoxi)phenyl]propane			
IARC group	3 - Not classifiable		
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bis-[4-(2,3-epoxipropoxi)phenyl]propane (1675-54-3)			
NOAEL (chronic, oral, animal/male, 2 years)       15 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 4 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 87 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:, Remarks on rest other:			
NOAEL (chronic, oral, animal/female, 2 years)	100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:, Remarks on results: other:		
Reproductive toxicity :	Not classified		
STOT-single exposure :	Not classified		
STOT-repeated exposure :	Not classified		
1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether (2425-79-8)			
LOAEL (oral, rat, 90 days)	200 mg/kg bodyweight/day		
Aspiration hazard :	Not classified		
Alchemix EP 4350			
Viscosity, kinematic	Not applicable		

## **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general: Toxic to aquatic life with long lasting effects.Hazardous to the aquatic environment, short-term: Not classified(acute):Hazardous to the aquatic environment, long-term: Toxic to aquatic life with long lasting effects.(chronic): Toxic to aquatic life with long lasting effects.Not rapidly degradable: Toxic to aquatic life with long lasting effects.			
bis-[4-(2,3-epoxipropoxi)phenyl]propane (167	5-54-3)		
LC50 - Fish [1] 1.2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Saln gairdneri)			
EC50 72h - Algae [1] 9.4 mg/l Test organisms (species): Scenedesmus capricornutum			
EC50 72h - Algae [2]       > 11 mg/l Test organisms (species): Scenedesmus capricornutum			
LOEC (chronic) 1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'			
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
TGMDA, multifunctional epoxide (28768-32-3)			
LC50 - Fish [1] 2.454 mg/l Source: Ecological Structure Activity Relationships			
EC50 - Crustacea [1] 14.682 mg/l Daphnia magna (Water flea)			
EC50 96h - Algae [1]	38.234 mg/l Source: Ecological Structure Activity Relationships		
1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether (2425-79-8)			
LC50 - Fish [1] 19.8 mg/l			
EC50 - Crustacea [1]	22 mg/l Source: National Institute of Technology and Evaluation		
EC50 72h - Algae [1]	> 93 mg/l Source: National Institute of Technology and Evaluation		
40.0 Development of development debilities			

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential			
bis-[4-(2,3-epoxipropoxi)phenyl]propane (1675-54-3)			
Partition coefficient n-octanol/water (Log Pow) 2.918 – 3.566 (25°C, pH 7.1)			
Partition coefficient n-octanol/water (Log Kow)	≥ 2.821		
TGMDA, multifunctional epoxide (28768-32-3)			
Partition coefficient n-octanol/water (Log Pow) 2.12			
1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether (2425-79-8)			
Partition coefficient n-octanol/water (Log Pow) -0.269 (25°C)			
12.4. Mobility in soil			
TGMDA, multifunctional epoxide (28768-32-3)			
Mobility in soil	67.88 Source: EPI Suite		
Organic Carbon Normalized Adsorption Coefficient 2.53 (Log Koc)			
1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether (2425-79-8)			
Mobility in soil         0.48 Source: Quantitative Structure Activity Relation			
12.5. Results of PBT and vPvB assessment			
No additional information available			
12.6. Other adverse effects			

No additional information available

SECTION 13: Disposal considerations			
13.1. Waste treatment methods			
Waste treatment methods HP Code	<ul> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>HP3 - "Flammable:" <ul> <li>flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point &gt; 55 °C and ≤ 75 °C;</li> <li>flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;</li> <li>flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;</li> <li>flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;</li> <li>water reactive waste: the which, in contact with water, emits flammable gases in dangerous quantities;</li> <li>other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.</li> <li>HP11 - "Mutagenic:" waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell.</li> <li>HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.</li> <li>HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment</li> </ul> </li> </ul>		

### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

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ADR	IMDG	ΙΑΤΑ	ADN	RID
Special provision(s) applied : 375	Special provision(s) appli : 969	ed Special provision(s) applied : A197	Special provision(s) applied : 375	Special provision(s) applie : 375
	gle or inner packaging of 5	n packagings containing a net qu kg or less for solids, are not subj 1.2 and 4.1.1.4 to 4.1.1.8.		
14.1. UN number				
UN 3077	UN 3077	UN 3077	UN 3077	UN 3077
14.2. UN proper shippin	g name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin)	Environmentally hazardous substance, solid, n.o.s. (Epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin)
Transport document descr	iption		I	
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin), 9, 1 MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s. (Epoxy resin), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin), 9, II
14.3. Transport hazard o	class(es)		<u>.</u>	
9	9	9	9	9
14.4. Packing group		·		
III	III	III	111	III
14.5. Environmental haz	ards			
Dangerous for the environment: Yes			Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information	on available		I	1
14.6. Special precaution	s for user			
Overland transport	5 101 4301			
Classification code (ADR):M7Special provisions (ADR):274, 335, 375, 601Limited quantities (ADR):5kgExcepted quantities (ADR):E1Packing instructions (ADR):P002, IBC08, LP02, R001Special packing provisions (ADR):PP12, B3Mixed packing provisions (ADR):MP10Portable tank and bulk container instructions (ADR):T1, BK1, BK2, BK3Portable tank and bulk container special provisions:TP33(ADR):SGAV, LGBVVehicle for tank carriage:ATTransport category (ADR):3				
Special provisions for carriage Special provisions for carriage		V13 VC1, VC2		

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Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	
	<b>90</b>
	3077
	3077
Tunnel restriction code (ADR)	:-
EAC code	: 2Z
Transport by sea	
Special provisions (IMDG)	: 274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP02, P002
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: BK1, BK2, BK3, T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23
•• •	
Air transport	-4
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA)	: Y956
PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA)	: 30kgG : 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197, A215
ERG code (IATA)	: 9L
Inland waterway transport	
Classification code (ADN)	: M7
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T* B**
Equipment required (ADN)	: PP, A***
Number of blue cones/lights (ADN)	: 0
Additional requirements/Remarks (ADN)	: * Only in the molten state. ** For carriage in bulk see also 7.1.4.1. ** * Only in the case of
	transport in bulk.
Rail transport	· M7
Classification code (RID)	: M7 · 274 225 275 601
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID) Excepted quantities (RID)	: 5kg : E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: PP12, B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2, BK3
Portable tank and bulk container special provisions	: TP33
(RID)	
Tank codes for RID tanks (RID)	: SGAV, LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W13
Special provisions for carriage – Bulk (RID)	: VC1, VC2
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Special provisions for carriage - Loading, unloading	:	CW13, CW31
and handling (RID)		
Colis express (express parcels) (RID)	:	CE11
Hazard identification number (RID)	:	90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

#### Not applicable

### SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

#### **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### **Explosives Precursors Regulation (2019/1148)**

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors) Please see https://ec.europa.eu/home-affairs/system/files/2021-11/list\_of\_competent\_authorities\_and\_national\_contact\_points\_en.pdf

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### **SECTION 16: Other information**

Abbreviations and acronyms:			
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived Minimal Effect level		

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Abbreviations and acronyms:			
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
EN	European Standard		
IARC	International Agency for Research on Cancer		
ΙΑΤΑ	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
РВТ	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		
ThOD	Theoretical oxygen demand (ThOD)		
TLM	Median Tolerance Limit		
VOC	Volatile Organic Compounds		
CAS-No.	Chemical Abstract Service number		
N.O.S.	Not Otherwise Specified		
vPvB	Very Persistent and Very Bioaccumulative		
ED	Endocrine disrupting properties		

Full text of H- and EUH-statements:		
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H302	Harmful if swallowed.	
H312	Harmful in contact with skin.	
H315	Causes skin irritation.	

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Full text of H- and EUH-statements:		
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H341	Suspected of causing genetic defects.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Muta. 2	Germ cell mutagenicity, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 01/02/2023 Version: 9.0

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

#### 1.1. Product identifier

Product form	:	Mixture
Trade name	:	EMP160 High Temperature Epoxy Moulding Paste Hardener
Product code	:	EMP160-B

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

#### 1.2.1. Relevant identified uses

Main use category Use of the substance/mixture : Industrial use, Professional use : Casting compound

#### 1.2.2. Uses advised against

No additional information available

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

Easy Composites Ltd Unit 39, Park Hall Business Village, Stoke on Trent, Staffordshire, ST3 5XA United Kingdom.

Tel: +44 (0)1782 454499

sales@easycomposites.com

#### 1.4. Emergency telephone number

Emergency number

: +44 (0)1782 454499 (working hours only)

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412
Full text of H- and EUH-statements: see section 16	

#### Adverse physicochemical, human health and environmental effects

Harmful if inhaled. Harmful if swallowed. Causes severe skin burns and eve damage. May cause an allergic skin reaction. Causes serious eve damage. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

Labelling according to Regulation (EC) No.	1272/2008 [CLP]	
Hazard pictograms (CLP)		
	GHS05	GHS07

Signal word (CLP) Contains

: Danger

m-phenylenebis(methylamine); 3-aminomethyl-3,5,5-trimethylcyclohexylamine; Styrenated phenol

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Hazard statements (CLP) :	H302+H332 - Harmful if swallowed or if inhaled. 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 (CLP) :	<ul> <li>P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.</li> <li>P264 - Wash hands thoroughly after handling.</li> <li>P280 - Wear protective gloves, protective clothing, eye protection.</li> <li>P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor.</li> <li>P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes.</li> <li>Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.</li> <li>P321 - Specific treatment (see supplemental first aid instruction on this label).</li> </ul>

### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

#### Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
m-phenylenebis(methylamine)	CAS-No.: 1477-55-0 EC-No.: 216-032-5 REACH-no: 01-2119480150- 50	25 – 50	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412
3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS-No.: 2855-13-2 EC-No.: 220-666-8 EC Index-No.: 612-067-00-9 REACH-no: 01-2119514687- 32	25 – 50	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 3, H412
Styrenated phenol	CAS-No.: 61788-44-1 EC-No.: 262-975-0 REACH-no: 01-2119980970- 27	1 – 25	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS-No.: 2855-13-2 EC-No.: 220-666-8 EC Index-No.: 612-067-00-9 REACH-no: 01-2119514687- 32	( 0.001 ≤C ≤ 100) Skin Sens. 1A, H317

Full text of H- and EUH-statements: see section 16

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SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	: Call a physician immediately.	
First-aid measures after inhalation	<ul> <li>Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.</li> </ul>	
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.	
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	<ul> <li>Burns. May cause an allergic skin reaction.</li> <li>Serious damage to eyes.</li> <li>Burns.</li> </ul>	

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

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the subs	tance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	<ul> <li>Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.</li> </ul>

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective ec	quipment and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.		
6.1.2. For emergency responders			
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containment and cleaning up			
Methods for cleaning up Other information	<ul><li>Take up liquid spill into absorbent material.</li><li>Dispose of materials or solid residues at an authorized site.</li></ul>		
6.4. Reference to other sections			

For further information refer to section 13.

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SECTION 7: Handling and storag	je
7.1. Precautions for safe handling	
Precautions for safe handling	: Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, incl	luding any incompatibilities

Storage conditions

: Store locked up. Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

**Skin and body protection:** Wear suitable protective clothing

Hand protection: Protective gloves

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#### 8.2.2.3. Respiratory protection

#### **Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

### **SECTION 9: Physical and chemical properties**

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

Physical state	: Liquid
Colour	: amber.
Odour	: Amine-like.
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Density	: 0.95 – 1 g/cm³ (25°C)
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 10 – 20 mPa.s (25°C)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability** 

Stable under normal conditions.

**10.3. Possibility of hazardous reactions** 

No dangerous reactions known under normal conditions of use.

#### **10.4. Conditions to avoid**

None under recommended storage and handling conditions (see section 7).

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### 10.5. Incompatible materials

#### No additional information available

#### **10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11.1 Information on toxicological effect	ts
cute toxicity (oral) cute toxicity (dermal) cute toxicity (inhalation)	<ul> <li>Harmful if swallowed.</li> <li>Not classified</li> <li>Harmful if inhaled.</li> </ul>
Hardener H4350	
ATE CLP (oral)	1028.894 mg/kg bodyweight
ATE CLP (dust,mist)	2.821 mg/l/4h
m-phenylenebis(methylamine) (1477-5	5-0)
LD50 oral rat	930 mg/kg Source: ECHA
LD50 oral	1180 mg/kg LD50 oral mouse
LD50 dermal rat	> 3100 mg/kg bodyweight Animal: rat, Remarks on results: other:
LD50 dermal rabbit	> 3100 mg/kg Source: ECHA
LC50 Inhalation - Rat (Dust/Mist)	1.34 mg/l/4h
3-aminomethyl-3,5,5-trimethylcyclohe	xylamine (2855-13-2)
LD50 oral rat	1030 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
LD50 dermal rabbit	> 1840 mg/kg
Styrenated phenol (61788-44-1)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
Skin corrosion/irritation	: Causes severe skin burns.
Styrenated phenol (61788-44-1)	
pH	6.85 Temp.: 30 °C Concentration: 1 vol% Remarks on result: 'other:'
erious eye damage/irritation	: Causes serious eye damage.
Styrenated phenol (61788-44-1)	
pH	6.85 Temp.: 30 °C Concentration: 1 vol% Remarks on result: 'other:'
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

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3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)		
LOAEL (oral, rat, 90 days)	160 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity Study in Rodents)	
Styrenated phenol (61788-44-1)		
LOAEL (oral, rat, 90 days)	337 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Remarks on results: other:	
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)	
Aspiration hazard :	Not classified	
m-phenylenebis(methylamine) (1477-55-0)		
Viscosity, kinematic	3.82 mm²/s (40°C)	
3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)		
Viscosity, kinematic	19 mm²/s Temp.: 'other:' Parameter: 'kinematic viscosity (in mm²/s)'	

## **SECTION 12: Ecological information**

### 12.1. Toxicity

· · · · · · · · · · · · · · · · · · ·	
Ecology - general : Hazardous to the aquatic environment, short-term : (acute)	Harmful to aquatic life with long lasting effects. Not classified
	Harmful to aquatic life with long lasting effects.
m-phenylenebis(methylamine) (1477-55-0)	1
LC50 - Fish [1]	87.6 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	15.2 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	20.3 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	33.3 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	33.3 mg/l Source: EHCA
LOEC (chronic)	15 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	4.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
3-aminomethyl-3,5,5-trimethylcyclohexylamir	ne (2855-13-2)
LC50 - Fish [1]	110 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	17.4 mg/l
EC50 72h - Algae [1]	37 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 50 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

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Styrenated phenol (61788-44-1)	
EC50 - Crustacea [1]	4.6 mg/l
EC50 72h - Algae [1]	3.14 mg/l Scenedesmus subspicatus
NOEC (chronic)	0.115 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic crustacea	0.115 mg/l Daphnia magna (Water flea)

### 12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential	
m-phenylenebis(methylamine) (1477-55-0)	
Partition coefficient n-octanol/water (Log Pow)	0.18
Partition coefficient n-octanol/water (Log Kow)	0.18 (25°C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal consideration	ations
13.1. Waste treatment methods	
Waste treatment methods HP Code	<ul> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.</li> <li>HP8 - "Corrosive:" waste which on application can cause skin corrosion.</li> <li>HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.</li> <li>HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment</li> </ul>

## **SECTION 14: Transport information**

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number				
UN 2735	UN 2735	UN 2735	UN 2735	UN 2735
14.2. UN proper shipping name				
POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS : m- phenylenebis(methylamine)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS : m- phenylenebis(methylamine)	Amines, liquid, corrosive, n.o.s. (CONTAINS : m- phenylenebis(methylamine) )	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS : m- phenylenebis(methylamine)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS : m- phenylenebis(methylamine)
)	)		)	)

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ADR	IMDG	ΙΑΤΑ	ADN	RID
Transport document descr	Transport document description			
UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS : m- phenylenebis(methylamine) ), 8, II, (E)	UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS : m- phenylenebis(methylamine ), 8, II	UN 2735 Amines, liquid, corrosive, n.o.s. (CONTAINS : m- phenylenebis(methylamine) ), 8, II	UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS : m- phenylenebis(methylamine) ), 8, II	UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS : m- phenylenebis(methylamine) ), 8, II
14.3. Transport hazard o	class(es)			
8	8	8	8	8
B	B	R R	B	8
14.4. Packing group				
II	II	II	II	II
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information	on available			
14.6. Special precaution	s for user			
Classification code (ADR) Special provisions (ADR) Limited quantities (ADR) Excepted quantities (ADR) Packing instructions (ADR) Mixed packing provisions (AD Portable tank and bulk contail Portable tank and bulk contail (ADR) Tank code (ADR) Vehicle for tank carriage Transport category (ADR) Hazard identification number Orange plates Tunnel restriction code (ADR) EAC code	: 2 : 1 : E : F : F : N ner instructions (ADR) : 1 ner special provisions : 1 : L : 4 : 2 (Kemler No.) : 8	22 2001, IBC02 AP15 11 P1, TP27 4BN AT 0 <b>80</b> <b>2735</b>		
Transport by sea Special provisions (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Segregation (IMDG)	: F OG) : I G) : 7 G) : 7 : 7 : 8 : 8 : 6 : 6	L 22 2001 3C02 11 P1, TP27 -A 5-B		

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Properties and observations (IMDG)	: Colourless to yellowish liquids or solutions with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. Reacts violently with acids. Cause burns to skin, eyes and mucous membranes.
Air transport	
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y840
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855
CAO max net quantity (IATA)	: 30L
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L
Inland waterway transport	
Classification code (ADN)	: C7
Special provisions (ADN)	: 274
Limited quantities (ADN)	: 1L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: C7
Special provisions (RID)	: 274
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP15
Portable tank and bulk container instructions (RID)	: T11
Portable tank and bulk container special provisions	: TP1, TP27
(RID) Tank codes for PID tanks (RID)	· 14DN
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	
Colis express (express parcels) (RID)	: CE6
Hazard identification number (RID)	: 80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

#### Not applicable

### SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

#### **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

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#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### **SECTION 16: Other information**

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Abbreviations and acronyms:	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H332	Harmful if inhaled.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Skin Corr. 1	Skin corrosion/irritation, Category 1	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1A	Skin sensitisation, category 1A	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.