



SAFETY DATA SHEET

according to Regulation (EU) 2015/830

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Toughseal Hardener

Revision 0

Revision date 2018-06-27

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

1.1. Product identifier

Product name	Toughseal Hardener
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1.3. Details of the supplier of the safety data sheet

Company	Clydebridge Chemicals Limited
Address	Arc House Terrace Road South Binfield, Bracknell Berkshire RG42 4PZ
Web	http://www.clydebridge.co.uk
Telephone	+44 (0)1189 862816
Email	enquiries@clydebridge.co.uk
Email address of the competent person	sds@clydebridge.co.uk

1.4. Emergency telephone number

Emergency telephone number	+44 (0)1270 502891
Company	NCEC 24 hours

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.2. Classification - EC 1272/2008	Acute Tox. 4: H302; Acute Tox. 4: H312; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412;
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2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	Acute Tox. 4: H302 - Harmful if swallowed. Acute Tox. 4: H312 - Harmful in contact with skin. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Skin Sens. 1: H317 - May cause an allergic skin reaction. Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Precautionary Statement: Prevention	P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P272 - Contaminated work clothing should not be allowed out of the workplace.

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2.2. Label elements

Precautionary Statement: Response	P273 - Avoid release to the environment.	
	P280 - Wear protective gloves/protective clothing/eye protection/face protection.	
	P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor/ /if you feel unwell.	
	P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.	
	P302+P352 - IF ON SKIN: Wash with plenty of water/ .	
	P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.	
Precautionary Statement: Storage	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
	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/ .	
	P312 - Call a POISON CENTER/doctor/ /if you feel unwell.	
	P321 - Specific treatment (see on this label).	
	P330 - Rinse mouth.	
	P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.	
	P363 - Wash contaminated clothing before reuse.	
	Precautionary Statement: Disposal	P405 - Store locked up.
		P501 - Dispose of contents/container to licensed waste disposal site

2.3. Other hazards

Other hazards	None known.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	612-067-00-9	2855-13-2	220-666-8	01-2119514687-32	50 - 60%	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412;
Benzyl alcohol	603-057-00-5	100-51-6	202-859-9	01-2119492630-38	30 - 40%	Acute Tox. 4: H332; Acute Tox. 4: H302;

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If you feel unwell, seek medical advice (show the label where possible).
Eye contact	Rinse immediately with plenty of water for 15 minutes. Seek medical attention if irritation or symptoms persist.
Skin contact	Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Ingestion	DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label.

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

Inhalation	Inhalation of vapour may cause shortness of breath.
Eye contact	May cause irritation to eyes.
Skin contact	May cause sensitisation by skin contact. Irritating to skin.
Ingestion	Ingestion causes burns to the respiratory tract. Irritating to mouth, throat and stomach.

SECTION 5: Firefighting measures

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5.1. Extinguishing media

Use foam, carbon dioxide, dry powder, sand or earth.

5.2. Special hazards arising from the substance or mixture

Burning produces irritating, toxic and obnoxious fumes.

5.3. Advice for firefighters

The product is not flammable. Use extinguishing media appropriate to the surrounding fire conditions. Wear suitable respiratory equipment when necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation of the working area. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection. Take off immediately all contaminated clothing.

6.2. Environmental precautions

Do not allow product to enter drains. Prevent further spillage if safe.

6.3. Methods and material for containment and cleaning up

Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

6.4. Reference to other sections

SECTION 13: Disposal considerations. SECTION 14: Transport information. SECTION 8: Exposure controls/personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a cool, dry, well ventilated area. Keep containers tightly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL: Derived no-effect level.

Exposure Pattern - Workers

Benzyl alcohol	Acute dermal - Local effects 47 mg/kg Long-term - dermal - Systemic effects 9.5 mg/kg
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Exposure Pattern - General population

Benzyl alcohol	Acute oral - Systemic effects 25 mg/kg Long-term - oral - Systemic effects 5 mg/kg
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8.2. Exposure controls

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8.2. Exposure controls

	
8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Wear suitable protective clothing.
Eye / face protection	Safety glasses.
Skin protection - Handprotection	Chemical resistant gloves (PVC).
Respiratory protection	Not normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Amber
Odour	Ammoniacal
Freezing Point	Not determined
Initial boiling point	> 190 °C
Flash point	> 90 °C
Relative density	1.07 (H ₂ O = 1 @ 20 °C)
Autoignition temperature	Not determined
Explosive properties	Not determined
Oxidising properties	Not determined
Solubility	Slightly soluble in water

SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
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10.2. Chemical stability

	Stable under normal conditions.
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10.3. Possibility of hazardous reactions

	Alkali metals. Strong acids. Strong exothermic reaction in contact with acids. Strong oxidising agents.
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10.4. Conditions to avoid

	Keep away from incompatible materials.
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10.5. Incompatible materials

	Strong acids. Oxidising agents.
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10.6. Hazardous decomposition products

	Burning produces obnoxious and irritating fumes.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin corrosion/irritation	CAUSES SEVERE SKIN BURNS.
Serious eye damage/irritation	Strong irritant with the danger of severe eye damage.

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11.1. Information on toxicological effects

Respiratory or skin sensitisation	May cause sensitisation by skin contact.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No carcinogenic effects reported.
Reproductive toxicity	Possible risk of harm to the unborn child. Possible risk of impaired fertility.

11.1.4. Toxicological Information

3-Aminomethyl-3,5,5-trimethylcy clohexylamine	Oral Rat LD50: 1030 mg/kg
Benzyl alcohol	Dermal Rat LD50: 2000 mg / kg Inhalation Rat LC50/4 h: >4178 mg/m3 Oral Rat LD50: 1620 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

3-Aminomethyl-3,5,5-trimethylcy clohexylamine	Daphnia EC50/48h: 23.0000 mg/l Fish LC50/96h: 110.0000 mg/l	Algae IC50/72h: 50 mg/l
Benzyl alcohol	Daphnia EC50/48h: 230.0000 mg/l Fish LC50/96h: 460 mg/l	Algae IC50/72h: 700.0000 mg/l

12.2. Persistence and degradability

	No data is available on this product.
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12.4. Mobility in soil

	No data is available on this product.
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12.5. Results of PBT and vPvB assessment

	This substance does not meet the criteria for classification as PBT or vPvB.
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12.6. Other adverse effects

	May cause long-term adverse effects in the aquatic environment.
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Further information

	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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SECTION 13: Disposal considerations

General information

	Dispose of in compliance with all local and national regulations.
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Disposal methods


	Dispose of this material and its container to hazardous or special waste collection point.
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Disposal of packaging

	After final product withdrawal, all residues must be removed from containers (drip-free, powder-free or paste-free).
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SECTION 14: Transport information

Hazard pictograms

	
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14.1. UN number

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14.1. UN number

	UN2735
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14.2. UN proper shipping name

	AMINES, LIQUID, CORROSIVE N.O.S.
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14.3. Transport hazard class(es)

ADR/RID	8
Subsidiary risk	-
IMDG	8
Subsidiary risk	-
IATA	8
Subsidiary risk	-

14.4. Packing group

Packing group	II
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14.5. Environmental hazards

Environmental hazards	No
Marine pollutant	No

ADR/RID

Hazard ID	80
Tunnel Category	(E)

IMDG

EmS Code	F-A S-B
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IATA

Packing Instruction (Cargo)	855
Maximum quantity	30 L
Packing Instruction (Passenger)	851
Maximum quantity	1 L

SECTION 15: Regulatory information

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

Regulations	This Safety Data Sheet has been prepared in accordance with Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Classification has been made in accordance with Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation).
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15.2. Chemical safety assessment

	Not required.
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SECTION 16: Other information

Other information

Data sources	Data extracted from individual component Safety Data Sheets.
Text of Hazard Statements in Section 3	Acute Tox. 4: H302 - Harmful if swallowed. Acute Tox. 4: H312 - Harmful in contact with skin. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Skin Sens. 1: H317 - May cause an allergic skin reaction. Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects. Acute Tox. 4: H332 - Harmful if inhaled.

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Further information

	<p>The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.</p>
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