

## Safety Data Sheet

In accordance with Regulation (EC) No 1907/2006

# SDS Stronghold Accelerator 801

Additive for Glass Reinforced Plastic GRP Roofing

The Glass Fibre Roofing Company Ltd

Revision date: 4<sup>th</sup> January 2021

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

#### 1.1 Product identifier

Product name: Stronghold Accelerator 801

Chemical name: Cobalt Accelerator

Substance/Mixture: Mixture

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

Relevant identified uses:

Additive for Glass Reinforced Plastic GRP Roofing.

Contact the manufacturer for any other application.

#### 1.3 Details of the Supplier of the safety data sheet

Manufacturer/Supplier:

The Glass Fibre Roofing Company Ltd, Unit 33 Pontygwindy Industrial Estate, Caerphilly CF83 3HU

Telephone number: 02920 888020

E-mail: sales@strongholdgrp.co.uk

This document is available online at <http://www.strongholdgrp.co.uk>

#### 1.4 Emergency telephone numbers

UK telephone number: 02920 888020 (Office hours only)

UK Urgent medical problem, NHS Direct: 111

UK Life-threatening emergency: 999

## SECTION 2: Hazards identification

### 2.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

Eye irritation	Category 2, H319
Skin Sensitization	Category 1
Reproductive Toxicity	Category 2
Acute aquatic toxicity	Category 1
Chronic Aquatic Toxicity	Category 3

### Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment	N, R50/53
Sensitising	Xi, R43
Toxic to Reproduction Category	Category 2, Xn, R62
Irritant	Xi, R36

### 2.2 Label elements

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

#### Hazard pictograms



Signal word: Warning

Hazard statements:

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H361f Suspected of damaging fertility

H410 Very toxic to aquatic life with long lasting effects

Precautionary statements:

P210 Obtain special instructions before use.

P261 Avoid breathing mist, vapours or spray.

P273 Avoid release to the environment

P280 Wear protective gloves/ eye protection/ face protection.

P281 Use personal protective equipment as required.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

Hazardous components which must be listed on the label:

Cobalt(II) 2-ethylhexanoate 136-52-7

### 2.3 Other hazards

No further data available.

PBT and vPvB assessment: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical name	CAS-No. EC-No. REACH Registration No.	% Weight	GHS Classification (REGULATION (EC) No 1272/2008)	Classification (67/548/EEC)
2,2,4-Trimethyl-1,3-pentanediol diisobutanoate	6846-50-0 229-934-9 01-211945109347	40 - 50	Aquatic Chronic 3; H412	
Cobalt(II) 2-ethylhexanoate	136-52-7 205-250-6 01-211952467829	30 - 40	Eye Irrit. 2; H319 Skin Sens. 1A; H317 Repr. 2; H361f Aquatic Acute 1; H400 Aquatic Chronic 3; H412	N; R50/53 Xi; R43 Repr.Cat.2; R62
Diethylene glycol butylether	112-34-5 203-961-6	20 - 25	Eye Irrit. 2; H319	Xi; R36

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
Eye Contact	Rinse with plenty of water. Remove contact lenses. Protect unharmed eye.
Skin contact	Take off contaminated clothing and shoes immediately. Rinse immediately with plenty of water. If skin irritation persists, call a physician.
Inhalation	If breathed in, move person into fresh air. Consult a physician after significant exposure. If not breathing, give artificial respiration.

	Consult a physician.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Obtain medical attention.

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

Symptoms	The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.
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#### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media	Alcohol-resistant foam Dry chemical
Extinguishing media which must not be used for Safety Reasons	High volume water jet

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

Specific hazards during firefighting / Specific hazards arising from the chemical	Water spray may be ineffective unless used by experienced firefighters. Do not allow run-off from fire-fighting to enter drains or water courses.
Combustion products	Carbon oxides

#### 5.3 Advice for firefighters

Special protective equipment for fire-fighters	In the event of fire, wear self-contained breathing apparatus.
Other information	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment. Ensure adequate ventilation.
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6.2 Environmental precautions

Environmental precautions	Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.
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6.3 Methods and material for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, Methods for containment acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.
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6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling	For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Avoid contact with skin, eyes and clothing.
Prevention of fire and explosion	Avoid formation of aerosol. Keep away from sources of ignition - No smoking. No sparking tools should be used. Take measures to prevent the build-up of electrostatic charge.

7.2 Conditions for safe storage, 3 including any incompatibilities

Requirements for storage areas and containers	Prevent unauthorized access. No smoking.
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	Keep container tightly closed in a dry and well-ventilated place.
Other data	No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Cobalt(II) Zethylhexanoate	136-52-7	TWA	0.1 mg/m3	2007-08-01	GB EH40	
	Further information	:	<p>53+54: Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological, irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even to tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to</p> <p>asthma. Not all workers who are exposed to a sensitiser will become hyperresponsive and it is impossible to identify in advance those who are likely to become hyper-responsive. 54 Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyperresponsiveness, but which do not include the disease themselves. The latter substances are not classified asthmagens or respiratory sensitisers. 55: Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance. Sen: Capable of causing occupational asthma. The identified substances are those which: - are assigned the risk phrase 'R42: May cause sensitisation by inhalation'; or 'R42/43: May cause sensitisation by inhalation and skin contact' or - are listed in section C of HSE publication 'Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma' as updated from time to time, or any other substance which the risk assessment has shown to be a potential cause of occupational asthma. Carc: Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH. 2: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used Carcinogenic applies for cobalt dichloride and sulphate. 56: The 'Sen' notation in the list of WELs has been assigned only to those substances which may cause occupational asthma. Cobalt</p>			
Diethylene glycol butylether	112-34-5	TWA	10 ppm 67.5 mg/m3	2009-12-19	2006/15/EC	
	Further information	:	Indicative			
		STEL	15 ppm 101.2 mg/m3	2009-12-19	2006/15/EC	

	Further information	:	Indicative			
		TWA	10 ppm 67.5 mg/m <sup>3</sup>	2007-08-01	GB EH40	
		STEL	15 ppm 101.2 mg/m <sup>3</sup>	2007-08-01	GB EH40	

STEL: Short term exposure limit

TWA: Time Weighted Average

Derived no effect level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value
2,2,4-Trimethyl-1,3-pentanediol diisobutanoate	Workers	Inhalation	Long-term systemic effects	110 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	31.2 mg/kg
	Consumers	Inhalation	Long-term systemic effects	32.6 mg/m <sup>3</sup>
	Consumers	Ingestion	Long-term systemic effects	18.8 mg/kg
	Consumers	Skin contact	Long-term systemic effects	18.8 mg/kg
	Cobalt(II) 2-ethylhexanoate	Consumers	Inhalation	Long-term local effects
Consumers		Ingestion	Long-term systemic effects	0.0558 mg/kg
Workers		Inhalation	Long-term local effects	0.235 mg/m <sup>3</sup>
Diethylene glycol butylether	Workers	Inhalation	Acute local effects	101.2 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	20 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	67.5 mg/m <sup>3</sup>
	Workers	Inhalation	Long-term local effects	67.5 mg/m <sup>3</sup>
	Consumers	Inhalation	Acute local effects	50.6 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	10 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	34 mg/m <sup>3</sup>
	Consumers	Ingestion	Long-term systemic effects	1.25 mg/kg bw/day
	Consumers	Inhalation	Long-term local effects	34 mg/m <sup>3</sup>



Predicted no effect concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
2,2,4-Trimethyl-1,3-pentanediol diisobutanoate	Fresh water	0.014 mg/l
	Marine water	0.0014 mg/l
	Sewage treatment plant	3 mg/l
	Fresh water sediment	5.29 mg/kg dry weight
	Marine sediment	0.529 mg/kg dry weight
Cobalt(II) 2-ethylhexanoate	Soil	1.05 mg/kg dry weight
	Marine water	0.00236 mg/l
	Fresh water sediment	0.0095 mg/kg dry weight
	Sewage treatment plant	0.000373 mg/l
Diethylene glycol butylether	Soil	0.00029 mg/kg dry weight
	Fresh water	1 mg/l
	Marine water	0.1 mg/l
	Intermittent water	3.9 mg/l
	Sewage treatment plant	200 mg/l
	Fresh water sediment	4 mg/kg
	Marine sediment	0.4 mg/kg
	Soil	0.4 mg/kg
Secondary Poisoning	56 mg/kg food	

## 8.2 Exposure controls

### Occupational exposure controls

Engineering measures	Effective exhaust ventilation system Ensure that eyewash stations and safety showers are close to the workstation location.
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### Personal protective equipment

General Information	Use personal protective equipment.
Respiratory protection	In the case of vapour or aerosol formation use a respirator with an approved filter. Filter A
Eye protection	Tightly fitting safety goggles
Skin and body protection	Protective suit
Hand protection	Butyl-rubber, Neoprene
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday. Wash contaminated clothing before re-use.

### Environmental exposure controls

Environmental exposure controls	Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.
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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Property	Values	Remark
Appearance	Violet	
Physical state	Liquid	
Particle size		
Odour	Faint	
Odour threshold	No data available	
pH	neutral	
Melting point/range	-10°C	
Freezing point		
Boiling point	No data available	
Flash point	72°C (Closed cup)	
Evaporation rate	No data available	
Flammability limits in air		
Upper	No data available	
Lower	No data available	
Vapour pressure	No data available	
Vapour density	No data available	
Density (relative)	0.963 @ 20°C	
Water solubility	Immiscible	
Partition coefficient n-octanol/water	No data available	
Solubility in other solvents	Miscible with most organic solvents, Phthalates	
Auto ignition temperature	No data available	
Decomposition temperature	No data available	
Viscosity, kinematic	17.13 mm <sup>2</sup> /s at 20 °C	
Viscosity, dynamic	16.5 mPa.s at 20 °C	
Explosive properties	Not explosive	
Oxidizing properties	Not classified as oxidising	

Other safety information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Avoid contact with (organic) peroxides, unless under controlled processing.

10.6 Hazardous decomposition products

Cobalt oxides products, Carbon oxides

SECTION 11: Toxicological information

Inhalation	Inhalation of aerosols may cause irritation to mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.
Skin	May cause an allergic skin reaction. May cause skin irritation.
Eyes	Causes serious eye irritation.
Ingestion	May be harmful if swallowed.
Toxicology Assessment	Suspected of damaging fertility or the unborn child.

11.1 Information on toxicological effects

Toxicology data for the components:

Toxicology Assessment Cobalt(II) 2-ethylhexanoate

CMR effects	Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, based on animal experiments.
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Test result 2,2,4-Trimethyl-1,3-pentanediol diisobutanoate

Aspiration toxicity	No aspiration toxicity classification
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Cobalt(II) 2-ethylhexanoate

Acute oral toxicity	LD50: > 2,000 mg/kg Species: Rat
Skin irritation	Moderately irritating.
Eye irritation	Result: Irritating to eyes.
Aspiration toxicity	No aspiration toxicity classification

Diethylene glycol butylether

Acute oral toxicity	LD50: 2,410 mg/kg Species: Mouse Method: OECD Test Guideline 401 Literature data.
Acute dermal toxicity	LD50: 2,764 mg/kg Species: Rabbit Method: OECD Test Guideline 402 Literature data.
Eye irritation	Species: Rabbit Result: Irritating to eyes. Literature data.
Sensitisation	Maximisation Test (GPMT) Species: Guinea pig Result: Does not cause skin sensitisation.

	Method: OECD Test Guideline 406 Literature data.
Germ cell mutagenicity	
Genotoxicity in vitro	Ames test Salmonella typhimurium Result: negative Method: OECD Test Guideline 471 Literature data.
Genotoxicity in vivo	In vivo micronucleus test Species: Mouse Result: negative Literature data.
Reproductive toxicity/Development/Teratogenicity	Species: Rat Application Route: Oral General Toxicity Maternal: No observed adverse effect level: 633 mg/kg bw/day Teratogenicity: No observed adverse effect level: 633 mg/kg bw/day Method: OECD Test Guideline 414 Literature data.

## SECTION 12: Ecological Information

Product information:

Ecotoxicology Assessment

Additional ecological information	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.
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### 12.1 Toxicity

Components

Ecotoxicology Assessment 2,2,4-Trimethyl-1,3-pentanediol diisobutanoate

Acute aquatic toxicity	No toxicity at the limit of solubility
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Chronic aquatic toxicity	Harmful to aquatic life with long lasting effects.
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Cobalt(II) 2-ethylhexanoate

Acute aquatic toxicity	Very toxic to aquatic life.
Chronic aquatic toxicity	Harmful to aquatic life with long lasting effects.

Test result

2,2,4-Trimethyl-1,3-pentanediol diisobutanoate

Toxicity to daphnia and other aquatic invertebrates	NOEC: 0.7 mg/l Exposure time: 21 d reproduction rate Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
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Cobalt(II) 2-ethylhexanoate

Toxicity to algae	NOEC: 245,1 Exposure time: 72 h Species: Skeletonema costatum Test Type: Growth inhibition Method: Other guidelines
Toxicity to fish (Chronic toxicity)	NOEC: 1.02 mg/l Exposure time: 33 d Species: Danio rerio (zebra fish) Test Type: flow-through test Method: No data available Read-across from supporting substance (structural analogue or surrogate).
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	NOEC: 60,8 Exposure time: 21 d reproduction rate Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211 Read-across from supporting substance (structural analogue or surrogate).

Diethylene glycol butylether

Toxicity to fish	LC50: 1,300 mg/l Exposure time: 96 h Species: Lepomis macrochirus (Bluegill sunfish)
Toxicity to daphnia and other aquatic invertebrates	EC50: 3,200 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Test Type: Immobilization
Toxicity to bacteria	EC50: 255 mg/l Species: Bacteria Test Type: Growth inhibition

### 12.2 Persistence and degradability

Product information	No information available.
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#### Components

Cobalt(II) 2-ethylhexanoate

Biodegradability	Result: Readily biodegradable
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Diethylene glycol butylether

Biodegradability	Result: Readily biodegradable Method: OECD Test Guideline 301C
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### 12.3 Bio accumulative potential

Product information	No information available.
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#### Components

Diethylene glycol butylether

Bioaccumulation	Bioaccumulation is unlikely.
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### 12.4 Mobility in soil

Product information	No information available.
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#### Components

Diethylene glycol butylether

Mobility	No data available.
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### 12.5 Results of PBT and vPvB assessment

#### Product information

PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
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#### Components

Diethylene glycol butylether

PBT and vPvB assessment	No data available
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12.6 Other adverse effects

Product information	No information available.
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Components

Diethylene glycol butylether

Biochemical Oxygen Demand (BOD)	No data available
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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.
Hazardous waste	Dispose of contents/container in accordance with local regulation.
Contaminated packaging	Empty remaining contents. Dispose of as unused product.

SECTION 14: Transport information

14.1 UN Number

ADR/RID	UN3082
IMDG/IMO	UN3082
ICAO/IATA	UN3082
ADN	UN3082

14.2 UN proper shipping name

ADR/RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cobalt(II) 2-ethylhexanoate)
IMDG/IMO	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cobalt(II) 2-ethylhexanoate)
ICAO/IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cobalt(II) 2-ethylhexanoate)
ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cobalt(II) 2-ethylhexanoate)

14.3 Transport hazard class

ADR/RID	Hazard class 9
IMDG/IMO	Hazard class 9
ICAO/IATA	Hazard class 9

ADN	Hazard class 9
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#### 14.4 Packing group

ADR/RID	III
IMDG/IMO	III
ICAO/IATA	III
ADN	III

#### 14.5 Environmental hazards

ADR/RID	Yes
IMDG/IMO	Yes
Marine pollutant	Yes
ICAO/IATA	Yes
ADN	Yes

#### 14.6 Special precautions for user

ADR/RID	Classification code	M6
	Tunnel restriction code	(E)
IMDG/IMO	EmS	F-A, S-F

#### Special precautions for users

No information available.

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

### SECTION 15: Regulatory information

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

Major Accident Hazard Legislation:

ZEU\_SEVES3 ENVIRONMENTAL HAZARDS E1

Quantity 1: 100 t

Quantity 2: 200 t

### SECTION 16: Other information

Explanations for possible abbreviations mentioned in section 2

PBT : PBT: Persistent, bioaccumulative and toxic.

vPvB : vPvB: Very persistent and very bioaccumulative.

OEL : OEL: Occupational exposure limit.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.

End of Safety Data Sheet