

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

1.1. Product identifier

Product form	: Mixture
Product name	: Altro Expand Coloured / Altro Expand Vertical Hardener
Product code	: E_H; EV_H
Product group	: End product

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

1.2.1. Relevant identified uses

Main use category	: Industrial use, Professional use
Use of the substance/mixture	: Amine Epoxy Hardener - Industrial flooring & wall coatings.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Altro Resin Systems
Unit 3 Station Road Industrial Estate
Station Road
GB- DT2 0AE Maiden Newton Dorchester
T 01300 320620
sds@altro.com - www.altro.com

Other

Altro GmbH
Ebertallee 209
06846 Dessau-Roßlau
DE
T +49 (0) 340 6500-0

1.4. Emergency telephone number

Emergency number	: 01462 480480 Monday - Friday 09:00-17:00
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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
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 2	H411
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

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Contains	: BENZYL ALCOHOL; 2-PIPERAZIN-1-YLETHYLAMINE; Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia; 3-AMINOPROPYLDIMETHYLAMINE; Nitric acid, ammonium calcium salt; 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL; Bis((dimethylamino)methyl)phenol; Amines, coco alkyl; Phenol, styrenated; 2,2,4-Trimethylhexane-1-6-diamine; Formaldehyde, oligomeric reaction products with 3,3'-iminodi(propylamine)
Hazard statements (CLP)	: H302 - Harmful if swallowed. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P261 - Avoid breathing vapours, spray. P264 - Wash Skin or affected areas thoroughly after handling. P280 - Wear protective clothing, eye protection, face protection, protective gloves. P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER, a doctor. 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, a doctor. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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]
BENZYL ALCOHOL	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5 REACH-no: 01-2119492630-38	$\geq 5 - < 15$	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h)
2-PIPERAZIN-1-YLETHYLAMINE	CAS-No.: 140-31-8 EC-No.: 205-411-0 EC Index-No.: 612-105-00-4 REACH-no: 01-2119471486-30	$\geq 10 - < 15$	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 3 (Dermal), H311 (ATE=866 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	CAS-No.: 90-72-2 EC-No.: 202-013-9 EC Index-No.: 603-069-00-0	$\geq 5 - < 10$	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1C, H314 Eye Dam. 1, H318

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Formaldehyde, oligomeric reaction products with 3,3'-iminodi(propylamine)	CAS-No.: 161278-35-9	≥ 3 – < 10	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Corr. 1B, H314 Eye Dam. 1, H318
Phenol, styrenated	CAS-No.: 61788-44-1 EC-No.: 262-975-0	≥ 3 – < 10	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia	CAS-No.: 9046-10-0 EC-No.: 618-561-0 REACH-no: 01-2119557899-12	≥ 3 – < 5	Skin Corr. 1, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412
ETHANOL substance with national workplace exposure limit(s) (GB)	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5	≥ 1 – < 3	Flam. Liq. 2, H225 Eye Irrit. 2, H319
Nitric acid, ammonium calcium salt	CAS-No.: 15245-12-2 EC-No.: 239-289-5	≥ 1 – < 3	Acute Tox. 4 (Oral), H302 (ATE=300 mg/kg bodyweight) Eye Dam. 1, H318
Amines, coco alkyl	CAS-No.: 61788-46-3 EC-No.: 262-977-1 EC Index-No.: 612-285-00-4	≥ 0.1 – < 3	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)
2,2,4-Trimethylhexane-1-6-diamine	CAS-No.: 25513-64-8 EC-No.: 247-063-2 REACH-no: 01-2119560598-25	≥ 0.1 – < 3	Acute Tox. 4 (Oral), H302 (ATE=910 mg/kg bodyweight) Skin Corr. 1A, H314 Skin Sens. 1A, H317 Aquatic Chronic 3, H412
Bis((dimethylamino)methyl)phenol	CAS-No.: 71074-89-0	≥ 0.1 – < 3	Skin Corr. 1B, H314 Eye Dam. 1, H318
3-AMINOPROPYLDIMETHYLAMINE	CAS-No.: 109-55-7 EC-No.: 203-680-9 EC Index-No.: 612-061-00-6 REACH-no: 2119486842-27-0000	< 1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 (ATE=1600 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Take off all contaminated clothing and wash its before reuse.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

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First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation	: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.
Symptoms/effects after skin contact	: irritation (itching, redness, blistering).
Symptoms/effects after eye contact	: Causes eye irritation. redness, itching, tears.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract. May cause redness and soreness of the mouth and throat. Corrosive burns may appear around the lips.

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	: Carbon dioxide (CO ₂). Dry powder. Water fog. Alcohol-resistant foam.
Unsuitable extinguishing media	: Do not use water jet to extinguish.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: In case of fire and/or explosion do not breathe fumes. On burning: release of toxic gases/vapours. Carbon oxides (CO, CO ₂).
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5.3. Advice for firefighters

Firefighting instructions	: Control run-off water by containing and keeping it out of sewers and watercourses.
Protection during firefighting	: Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. No flames, no sparks. Eliminate all sources of ignition.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment. Contain the spilled material by bunding.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide local exhaust or general room ventilation. Avoid contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep only in original container. Store in a dry place. Store in a closed container.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

ETHANOL (64-17-5)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	380 mg/m ³
WEL TWA (OEL TWA) [2]	200 ppm

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

BENZYL ALCOHOL (100-51-6)	
DNEL/DMEL (Workers)	
Long-term - local effects, dermal	≈ 8 mg/kg wet weight
Long-term - local effects, inhalation	≈ 22 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	≈ 1 mg/l
PNEC aqua (marine water)	≈ 0.1 mg/l
PNEC (Soil)	
PNEC soil	≈ 0.456 mg/kg dwt
2-PIPERAZIN-1-YLETHYLAMINE (140-31-8)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	10.6 mg/m ³
Acute - local effects, inhalation	80 mg/m ³
Long-term - systemic effects, dermal	3.33 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	10.6 mg/m ³
Long-term - local effects, inhalation	15 µg/m ³

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2-PIPERAZIN-1-YLETHYLAMINE (140-31-8)	
PNEC (Water)	
PNEC aqua (freshwater)	0.058 mg/l
PNEC aqua (marine water)	0.0058 mg/l
PNEC aqua (intermittent, freshwater)	0.58 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	215 mg/kg dwt
PNEC sediment (marine water)	21.5 mg/kg dwt
PNEC (Soil)	
PNEC soil	1 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	250 mg/l
Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia (9046-10-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	2.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5.29 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.015 mg/l
PNEC aqua (marine water)	0.0142 mg/l
PNEC aqua (intermittent, freshwater)	0.15 mg/l
PNEC aqua (intermittent, marine water)	0.142 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.132 mg/kg dwt
PNEC sediment (marine water)	0.125 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0176 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	6.93 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	7.5 mg/l
3-AMINOPROPYLDIMETHYLAMINE (109-55-7)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	1.2 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.0728 mg/l
PNEC aqua (marine water)	0.00728 mg/l
PNEC aqua (intermittent, freshwater)	0.34 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.735 mg/kg dwt

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3-AMINOPROPYLDIMETHYLAMINE (109-55-7)	
PNEC sediment (marine water)	0.0735 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.104 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l
ETHANOL (64-17-5)	
DNEL/DMEL (Workers)	
Acute - local effects, dermal	950 mg/m ³
Acute - local effects, inhalation	1900 mg/m ³
Long-term - systemic effects, dermal	343 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	950 mg/m ³
DNEL/DMEL (General population)	
Acute - local effects, dermal	950 mg/m ³
Long-term - systemic effects, oral	87 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	114 mg/m ³
Long-term - systemic effects, dermal	206 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.96 mg/l
PNEC aqua (marine water)	0.79 mg/l
PNEC aqua (intermittent, freshwater)	2.75 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.6 mg/kg KW
PNEC sediment (marine water)	2.9 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.63 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	0.72 mg/kg
PNEC (STP)	
PNEC sewage treatment plant	580 mg/l
BENZYLDMETHYLAMINE (103-83-3)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	2.8 mg/kg bodyweight/day
Acute - systemic effects, inhalation	9.9 mg/m ³
Long-term - systemic effects, dermal	8.33 mg/kg bw/day
Long-term - systemic effects, inhalation	4.9 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	1 mg/kg bodyweight/day
Acute - systemic effects, inhalation	1.74 mg/m ³

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BENZYLDMETHYLAMINE (103-83-3)	
Acute - systemic effects, oral	0.5 mg/kg bodyweight/day
Long-term - systemic effects, oral	0.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.87 mg/m ³
Long-term - systemic effects, dermal	0.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0048 mg/l
PNEC aqua (marine water)	0
PNEC aqua (intermittent, freshwater)	0.0134 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.071 mg/kg dwt
PNEC sediment (marine water)	0.0071 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0114 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	534 mg/l
Nitric acid, ammonium calcium salt (15245-12-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	13.9 mg/kg bw/day
Long-term - systemic effects, inhalation	98 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	10 mg/kg bodyweight/day
Long-term - systemic effects, oral	8.33 mg/kg bw/day
Long-term - systemic effects, inhalation	29 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
PNEC aqua (intermittent, freshwater)	4.5 µg/L
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (90-72-2)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	0.6 mg/kg bodyweight/day
Acute - systemic effects, inhalation	2.1 mg/m ³
Long-term - systemic effects, dermal	0.15 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.53 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	0.075 mg/kg bodyweight/day
Acute - systemic effects, inhalation	0.13 mg/m ³

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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (90-72-2)	
Long-term - systemic effects, oral	0.075 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.13 mg/m ³
Long-term - systemic effects, dermal	0.075 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.046 mg/l
PNEC aqua (marine water)	0.0046 mg/l
PNEC aqua (intermittent, freshwater)	0.46 mg/l
PNEC aqua (intermittent, marine water)	0.046 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.2621 mg/kg dwt
PNEC sediment (marine water)	0.026211 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0254 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0.2 mg/l
Phenol, styrenated (61788-44-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	21 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	74 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	7.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	13.1 mg/m ³
Long-term - systemic effects, dermal	7.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	4 µg/l
PNEC aqua (marine water)	0.4 µg/l
PNEC aqua (intermittent, freshwater)	46 µg/l
PNEC aqua (intermittent, marine water)	4.6 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.248 mg/kg dwt
PNEC sediment (marine water)	24.8 µg/kg dw
PNEC (Soil)	
PNEC soil	47.3 µg/kg dw
PNEC (STP)	
PNEC sewage treatment plant	36.2 mg/l
2,2,4-Trimethylhexane-1-6-diamine (25513-64-8)	
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.05 mg/kg bodyweight/day

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2,2,4-Trimethylhexane-1-6-diamine (25513-64-8)

PNEC (Water)

PNEC aqua (freshwater)	0.102 mg/l
PNEC aqua (marine water)	0.0102 mg/l
PNEC aqua (intermittent, freshwater)	0.315 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	0.622 mg/kg dwt
PNEC sediment (marine water)	0.062 mg/kg dwt

PNEC (Soil)

PNEC soil	10 mg/kg dwt
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PNEC (STP)

PNEC sewage treatment plant	72 mg/l
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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Wear eye protection

8.2.2.2. Skin protection

Skin and body protection:

Avoid contact with skin

Hand protection:

Standard EN 374 - Protective gloves against chemicals.

Other skin protection

Materials for protective clothing:

Keep work clothing separately

8.2.2.3. Respiratory protection

Respiratory protection:

Wear suitable respiratory equipment in case of insufficient ventilation

8.2.2.4. Thermal hazards

No additional information available

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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	: Colourless to pale yellow.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: ~ 120°C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: No specific test data are available.
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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 of use.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Avoid heat, flames or sparks.

10.5. Incompatible materials

Reactive metals (eg. sodium, calcium, zinc ect). Materials reactive with hydroxyl compounds. Organic acids (e.g. acetic acid, citric acid ect.). Mineral acids, sodium hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agent.

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10.6. Hazardous decomposition products

Nitric acid (HNO₃). Ammonia, Nitrogen oxides (NO_x) Nitrogen oxides can react with water vapour to form corrosive nitric acid, Carbon monoxide (CO), Carbon dioxide (CO₂), Aldehydes and flammable hydrocarbon fragments.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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ATE CLP (oral)	1232.994 mg/kg bodyweight
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BENZYL ALCOHOL (100-51-6)

LD50 oral	1580 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1410 - 1770
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Remarks on results: other:
LC50 Inhalation - Rat	> 4178 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:

2-PIPERAZIN-1-YLETHYLAMINE (140-31-8)

LD50 oral rat	≈ 2097 mg/kg bodyweight Animal: rat, Animal sex: male
LD50 oral	2140 mg/kg
LD50 dermal rabbit	866 mg/kg bodyweight Animal: rabbit, Animal sex: male

Reaction products of di-, tri- and tetra-propoxylyated propane-1,2-diol with ammonia (9046-10-0)

LD50 oral rat	2885 mg/kg similar to OECD guideline 401
LD50 dermal rabbit	2979.7 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 993,8 - 8934,1
LC50 Inhalation - Rat	> 0.74 mg/l 8h (IRT) no mortality was observed.

3-AMINOPROPYLDIMETHYLAMINE (109-55-7)

LD50 oral rat	1600 mg/kg
LD50 dermal rat	400 – 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	2138.7 mg/kg
LC50 Inhalation - Rat	> 4.31 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

ETHANOL (64-17-5)

LD50 oral rat	10470 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 9720 - 11380
LD50 oral	300 – 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	95.6 – 125 mg/l/4h
LC50 Inhalation - Rat (Vapours)	116.9 mg/l/4h

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Nitric acid, ammonium calcium salt (15245-12-2)	
LD50 oral rat	300 – 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity), Guideline: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (90-72-2)	
LD50 oral rat	2169 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1916 - 2455
Phenol, styrenated (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:
LC50 Inhalation - Rat	> 4.92 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Remarks on results: other:
2,2,4-Trimethylhexane-1-6-diamine (25513-64-8)	
LD50 oral rat	910 mg/kg bodyweight Animal: rat, Animal sex: male
Skin corrosion/irritation	: Causes severe skin burns. pH: No specific test data are available.
2-PIPERAZIN-1-YLETHYLAMINE (140-31-8)	
pH	12
Reaction products of di-, tri- and tetra-propoxylyated propane-1,2-diol with ammonia (9046-10-0)	
pH	11.6 pH (concentrated solution): 11.3
Phenol, styrenated (61788-44-1)	
pH	6.85 Temp.: 30 °C Concentration: 1 vol% Remarks on result: 'other:'
Serious eye damage/irritation	: Causes serious eye damage. pH: No specific test data are available.
2-PIPERAZIN-1-YLETHYLAMINE (140-31-8)	
pH	12
Reaction products of di-, tri- and tetra-propoxylyated propane-1,2-diol with ammonia (9046-10-0)	
pH	11.6 pH (concentrated solution): 11.3
Phenol, styrenated (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
3-AMINOPROPYLDIMETHYLAMINE (109-55-7)	
NOAEL (chronic, oral, animal/male, 2 years)	8 mg/kg bodyweight Animal: mouse, Animal sex: male
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
Amines, coco alkyl (61788-46-3)	
STOT-single exposure	May cause respiratory irritation.

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STOT-repeated exposure : Not classified

BENZYL ALCOHOL (100-51-6)

NOAEL (oral, rat, 90 days) 400 mg/kg bodyweight Animal: rat, Guideline: other:

3-AMINOPROPYLDIMETHYLAMINE (109-55-7)

LOAEL (oral, rat, 90 days) 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

LOAEC (inhalation, rat, vapour, 90 days) 0.323 mg/l air Animal: rat

NOAEC (inhalation, rat, vapour, 90 days) 0.144 mg/l air Animal: rat

ETHANOL (64-17-5)

LOAEL (oral, rat, 90 days) 3200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

NOAEL (oral, rat, 90 days) 1730 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other:

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (90-72-2)

NOAEL (oral, rat, 90 days) 15 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other:

Amines, coco alkyl (61788-46-3)

STOT-repeated exposure May cause damage to organs (gastro-intestinal tract, liver, immune system) through prolonged or repeated exposure.

Phenol, styrenated (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)

2,2,4-Trimethylhexane-1-6-diamine (25513-64-8)

LOAEL (oral, rat, 90 days) 60 mg/kg bodyweight Animal: rat

NOAEL (oral, rat, 90 days) 10 mg/kg bodyweight Animal: rat

Aspiration hazard : Not classified

BENZYL ALCOHOL (100-51-6)

Viscosity, kinematic 0.005 mm²/s

2-PIPERAZIN-1-YLETHYLAMINE (140-31-8)

Viscosity, kinematic 14.388 mm²/s

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia (9046-10-0)

Viscosity, kinematic 10.9 mm²/s

11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Not rapidly degradable

BENZYL ALCOHOL (100-51-6)	
LC50 - Fish [1]	460 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	230 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	770 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	500 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	76828 mg/l Test organisms (species): other:
NOEC chronic fish	48897 mg/l Test organisms (species): other: Duration: '30 d'
2-PIPERAZIN-1-YLETHYLAMINE (140-31-8)	
LC50 - Fish [1]	2190 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	58 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Reaction products of di-, tri- and tetra-propoxyated propane-1,2-diol with ammonia (9046-10-0)	
LC50 - Fish [1]	> 15 mg/l Test organisms (species): Oncorhynchus mykiss
LC50 - Fish [2]	772.14 mg/l Test organisms (species): Cyprinodon variegatus
EC50 - Crustacea [1]	80 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	418.34 mg/l Test organisms (species): Arcatia tonsa
EC50 72h - Algae [1]	15 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	2.1 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
NOEC (chronic)	7.64 mg/l Test organisms (species):
3-AMINOPROPYLDIMETHYLAMINE (109-55-7)	
LC50 - Fish [1]	122 mg/l Test organisms (species): Leuciscus idus melanotus
EC50 - Crustacea [1]	59.46 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	34 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	30 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
LOEC (chronic)	6.06 mg/l Test organisms (species): Daphnia magna Duration: '22 d'
NOEC (chronic)	3.64 mg/l Test organisms (species): Daphnia magna Duration: '22 d'
ETHANOL (64-17-5)	
LC50 - Fish [1]	13000 mg/l Test organisms (species): Oncorhynchus mykiss
EC50 - Crustacea [1]	> 10000 mg/l Test organisms (species): Daphnia magna

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ETHANOL (64-17-5)	
EC50 72h - Algae [1]	275 mg/l Test organisms (species): Chlorella vulgaris
NOEC chronic crustacea	9.6 mg/l Test organisms (species): Daphnia magna
NOEC chronic algae	280 mg/l Test organisms (species): Lemna gibbous
Nitric acid, ammonium calcium salt (15245-12-2)	
LC50 - Fish [1]	> 98.6 mg/l Test organisms (species): Rainbow Trout
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	490 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (90-72-2)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Cyprinus carpio
LC50 - Fish [2]	718 mg/l
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	46.7 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	25.5 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	84 mg/l Test organisms (species): Desmodesmus subspicatus
Phenol, styrenated (61788-44-1)	
LC50 - Fish [1]	1.77 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 72h - Algae [1]	1.35 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
NOEC (chronic)	0.115 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
2,2,4-Trimethylhexane-1-6-diamine (25513-64-8)	
EC50 72h - Algae [1]	43.5 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	1.02 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1.02 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 10.9 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '30 d'

12.2. Persistence and degradability

BENZYL ALCOHOL (100-51-6)	
Persistence and degradability	Readily biodegradable.
Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia (9046-10-0)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Must follow special treatment according to local regulation.
Ecology - waste materials	: Avoid release to the environment.
HP Code	: HP3 - "Flammable:" <ul style="list-style-type: none">– 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 > 55 °C and ≤ 75 °C;– 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;– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
	HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
	HP8 - "Corrosive:" waste which on application can cause skin corrosion.
	HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.
	HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information





In accordance with ADR / IMDG / ADN / RID

ADR	IMDG	ADN	RID
14.1. UN number or ID number			
UN 2735	UN 2735	UN 2735	UN 2735
14.2. UN proper shipping name			
AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS(2,4,6,-TRIS(DIMETHYLAMINOETHYL)PHENOL; amines coco alkyl))	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS(2,4,6,-TRIS(DIMETHYLAMINOETHYL)PHENOL; amines coco alkyl))	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS(2,4,6,-TRIS(DIMETHYLAMINOETHYL)PHENOL; amines coco alkyl))	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS(2,4,6,-TRIS(DIMETHYLAMINOETHYL)PHENOL; amines coco alkyl))

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ADR	IMDG	ADN	RID
Transport document description			
UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS(2,4,6,-TRIS(DIMETHYLAMINOETHYL)PHENOL; amines coco alkyl)), 8, II, (E), ENVIRONMENTALLY HAZARDOUS	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS(2,4,6,-TRIS(DIMETHYLAMINOETHYL)PHENOL; amines coco alkyl)), 8, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS(2,4,6,-TRIS(DIMETHYLAMINOETHYL)PHENOL; amines coco alkyl)), 8, II, ENVIRONMENTALLY HAZARDOUS	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS(2,4,6,-TRIS(DIMETHYLAMINOETHYL)PHENOL; amines coco alkyl)), 8, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)			
8	8	8	8
			
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C7
 Special provisions (ADR) : 274
 Limited quantities (ADR) : 1I
 Excepted quantities (ADR) : E2
 Packing instructions (ADR) : P001, IBC02
 Mixed packing provisions (ADR) : MP15
 Portable tank and bulk container instructions (ADR) : T11
 Portable tank and bulk container special provisions (ADR) : TP1, TP27
 Tank code (ADR) : L4BN
 Vehicle for tank carriage : AT
 Transport category (ADR) : 2
 Hazard identification number (Kemler No.) : 80
 Orange plates :



Tunnel restriction code (ADR) : E
 EAC code : 2X

Transport by sea

Special provisions (IMDG) : 274
 Limited quantities (IMDG) : 1 L
 Excepted quantities (IMDG) : E2
 Packing instructions (IMDG) : P001
 IBC packing instructions (IMDG) : IBC02
 Tank instructions (IMDG) : T11
 Tank special provisions (IMDG) : TP1, TP27
 EmS-No. (Fire) : F-A
 EmS-No. (Spillage) : S-B

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Stowage category (IMDG) : A
Segregation (IMDG) : SGG18, SG35
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.

Inland waterway transport

Classification code (ADN) : C7
Special provisions (ADN) : 274
Limited quantities (ADN) : 1 L
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 (RID) : TP1, TP27
Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE6
Hazard identification number (RID) : 80

14.7. Maritime transport in bulk according to IMO instruments

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)

ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

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Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Calcium ammonium nitrate	15245-12-2	ex 3102 60 00	ex 3824 99 96

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 additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
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 Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

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Full text of H- and EUH-statements:	
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

The classification complies with : ATP 12

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.