

# SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

**Product name: Trade Grade Roofing Resin**

**Creation date: 17.11.2021, Revision: 24.06.2024, version: 1.0**



## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

**Product name**

Trade Grade Roofing Resin



<https://my.chemius.net/p/HlzG9W/en/pd/en>

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

**Relevant identified uses**

Resin for roofing. Contact the manufacturer for any other applications.

**Uses advised against**

No information.

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

**Supplier**

GRP [UK] Ltd  
Unit 19 Riverside Ind Est, Bridge Lane  
Woolston, Warrington, WA1 4BA, Cheshire, United Kingdom  
01925 812809  
info@grpukltd.com

### 1.4 Emergency Telephone Number

**Emergency**

111

**Supplier**

01925 812809 Monday – Friday 8am – 4.30pm

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

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

Flam. Liq. 3; H226 Flammable liquid and vapour.

Skin Irrit. 2; H315 Causes skin irritation.

Eye Irrit. 2; H319 Causes serious eye irritation.

STOT SE 3; H335 May cause respiratory irritation.

Repr. 2; H361d Suspected of damaging the unborn child.

STOT RE 1; H372 Causes damage to organs through prolonged or repeated exposure (inhalation).

Aquatic Chronic 3; H412 Harmful to aquatic life with long lasting effects.

### 2.2 Label elements

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

**Signal word: DANGER**

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure (inhalation).

H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains phthalic anhydride, cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P243 Take action to prevent static discharges.

P260 Do not breathe vapours.

P273 Avoid release to the environment.

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

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

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.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

**Contains:**

styrene

**2.3 Other hazards****PBT/vPvB**

For PBT and vPvB assessment, see section 12.5.

**Endocrine disrupting properties**

No data.

**Additional information**

No information.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

For mixtures see 3.2.

**3.2 Mixtures**

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
styrene	100-42-5 202-851-5 601-026-00-0 01-2119457861-32	37 - 42	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 Repr. 2; H361d STOT RE 1; H372 Aquatic Chronic 3; H412	/	/
Synthetic amorphous silica, fumed, crystalline free	112945-52-5 231-545-4 - 01-2119379499-16	0.1-<1	/	/	/

phthalic anhydride	85-44-9 201-607-5 607-009-00-4 01-2119457017-41	0.1-<1	Acute Tox. 4; H302 Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Dam. 1; H318 Resp. Sens. 1; H334 STOT SE 3; H335	/	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	- 919-446-0 - 01-2119458049-33	0.1 - < 0.25	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H336 STOT RE 1; H372 Aquatic Chronic 2; H411 EUH066	/	P
cobalt bis(2-ethylhexanoate)	136-52-7 205-250-6 607-230-00-6 01-2119524678-29	0,01-<0,1	Skin Sens. 1A; H317 Eye Irrit. 2; H319 Repr. 1B; H360FD Aquatic Acute 1; H400; M = 1 Aquatic Chronic 3; H412	/	/

## Notes for substances

P	The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Eines No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes.  Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 shall apply.
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## SECTION 4: FIRST AID MEASURES

## 4.1 Description of first aid measures

## General notes

Person giving first aid should properly protect himself. See also section 8. Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician. No action shall be taken involving any personal risk or without suitable training.

## Following inhalation

Remove patient to fresh air - move out of dangerous area. Keep at rest in a position comfortable for breathing. If symptoms develop and persist, seek medical attention. If breathing is irregular or respiratory arrest occurs provide artificial respiration. Seek medical help immediately.

## Following skin contact

Take off all contaminated clothing. Wash affected skin areas immediately with plenty of water and soap. If symptoms develop and persist, seek medical attention.

## Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. Remove contact lenses, if present and easy to do. If irritation persists, seek professional medical attention.

## Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. Consult a physician. Show the physician the safety data sheet or label.

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

## Following inhalation

Danger of serious damage to health by prolonged exposure through inhalation. Can cause irritation of respiratory system. Coughing, sneezing, nasal discharge, labored breathing. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

## Following skin contact

Irritating to the skin. Itching, redness, pain. May cause sensitisation by skin contact (itching, redness, rashes).

**Following eye contact**

Causes severe eye irritation. Redness, tearing, pain.

**Following ingestion**

Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area. May cause nausea/vomiting and diarrhea. May cause abdominal discomfort.

**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**

Dry chemical powder.  
Foam.  
Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media**

Full water jet. Do not use water jet as an extinguisher, as this will spread the fire.

**5.2 Special hazards arising from the substance or mixture****Hazardous combustion products**

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>).

**5.3 Advice for firefighters****Protective actions**

In case of fire or heating do not breathe fumes/vapours. Vapours are heavier than air and spread along floor. Vapours may form explosive mixtures with the air. Cool containers at risk with water spray. If possible remove containers from endangered area. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**

Firefighters should wear appropriate protective clothing (BS EN 469) for firefighters (including helmets (BS EN 443), protective boots (BS EN 15090) and gloves (BS EN 659)) and self-contained breathing apparatus (SCBA) with a full face-piece (BS EN 137).

**Additional information**

Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel****Protective equipment**

Use personal protective equipment (Section 8).

**Precautionary measures**

Prevent accumulation of vapours - vapours and air can form explosive mixtures. Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking! Take precautionary measures against static discharges. Prevent sparking.

**Emergency procedures**

Prevent access to unauthorised personnel. No action shall be taken involving any personal risk or without suitable training. Avoid contact with skin, eyes and clothing. Do not breathe vapour or mist.

**For emergency responders**

Use personal protective equipment.

**6.2 Environmental precautions**

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

**6.3 Methods and material for containment and cleaning up****For containment**

Stem the spill if this does not pose risks.

**For cleaning up**

Prevent release into the sewer, water, basements or confined areas. Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Dispose in accordance with applicable regulations (see Section 13). Use spark-proof tools. Ventilate the premises.

**Other information**

See Section 12: ECOLOGICAL INFORMATION.

**6.4 Reference to other sections**

See also sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling****Protective measures****Measures to prevent fire**

Ensure adequate ventilation. Vapours are heavier than air and spread along the floor. They form explosive mixtures with air. Keep away from sources of ignition - no smoking. Take precautionary measures against static discharges. Ensure proper grounding of the equipment. Use spark-proof tools.

**Measures to prevent aerosol and dust generation**

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

**Measures to protect the environment**

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

**Other measures**

No information.

**Advice on general occupational hygiene**

Handle in accordance with good industrial hygiene and safety procedures. Follow instructions and regulation of safety and health at work. Wear suitable protective equipment; see Section 8. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/mist. Regular cleaning of equipment, work area and clothing is recommended. Remove contaminated clothes and wash them before reuse.

**7.2 Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions**

Store in accordance with local regulations. Keep in a cool, dry and well ventilated place. Store below 30°C. Protect from open fire, heat and direct sunlight. Keep away from sources of ignition - no smoking. Keep away from food, drink and animal feeding stuffs. Keep away from strong oxidising agents. Keep away from peroxides. Keep away from reducing agents.

**Packaging materials**

The original container of producer. Metallic GRP containers. Unsuitable material: copper, copper alloys, bronze, zinc.

**Requirements for storage rooms and vessels**

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled

containers.

Storage temperature

No information.

Storage class

No information.

Further information on storage conditions

No information.

### 7.3 Specific end use(s)

Recommendations

See identified uses in Section 1.2.

Industrial sector specific solutions

No information.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Occupational Exposure limit values

Name	mg/m <sup>3</sup>	ml/m <sup>3</sup>	Short-term value mg/m <sup>3</sup>	Short-term value ml/m <sup>3</sup>	Remark	Biological Tolerance Values
Cycloalkanes ≥C7	800	/	/	/	/	/
Normal and branched chain alkanes ≥C7	1200	/	/	/	/	/
Cobalt and Cobalt compounds (as Co)	0.1	/	/	/	Carc (cobalt dichloride and sulphate), Sen	/
Styrene (100-42-5)	430	100	1080	250	/	/
Phthalic anhydride (85-44-9)	4	/	12	/	Sen	/

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values

For product

No information.

For components

Name	Type	Exposure route	exp. frequency	Remark	Value
phthalic anhydride	Worker	inhalation	long term systemic effects	/	49.4 mg/m <sup>3</sup>
phthalic anhydride	Worker	dermal	long term systemic effects	/	14 mg/kg bw/day
phthalic anhydride	Consumer	inhalation	long term systemic effects	/	8.7 mg/m <sup>3</sup>
phthalic anhydride	Consumer	dermal	long term systemic effects	/	5 mg/kg bw/day
phthalic anhydride	Consumer	oral	long term systemic effects	/	5 mg/kg bw/day
cobalt bis(2-ethylhexanoate)	Worker	inhalation	long term local effects	/	235.1 µg/m <sup>3</sup>
cobalt bis(2-ethylhexanoate)	Consumer	inhalation	long term local effects	/	37 µg/m <sup>3</sup>

cobalt bis(2-ethylhexanoate)	Consumer	oral	long term systemic effects	/	175 µg/kg bw/day
styrene	Consumer	oral	long term systemic effects	/	2.1 mg/kg bw/day
styrene	Consumer	dermal	long term systemic effects	/	343 mg/kg bw/day
styrene	Worker	dermal	long term systemic effects	/	406 mg/kg bw/day
styrene	Consumer	inhalation	long term systemic effects	/	10.2 mg/m <sup>3</sup>
styrene	Worker	inhalation	long term systemic effects	/	85 mg/m <sup>3</sup>
styrene	Consumer	inhalation	short term systemic effects	/	174.25 mg/m <sup>3</sup>
styrene	Worker	inhalation	short term systemic effects	/	289 mg/m <sup>3</sup>
styrene	Consumer	inhalation	short term local effects	/	182.75 mg/m <sup>3</sup>
styrene	Worker	inhalation	short term local effects	/	306 mg/m <sup>3</sup>
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Worker	dermal	long term	systemic	44 mg/kg
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Worker	inhalation	long term	systemic	330 mg/m <sup>3</sup>
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Consumer	oral	long term	repeated	26 mg/kg
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Consumer	dermal	long term systemic effects	/	26 mg/kg
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Consumer	inhalation	long term local effects	/	71 mg/m <sup>3</sup>

### PNEC values

#### For product

No information.

#### For components

Name	Exposure route	Remark	Value
phthalic anhydride	fresh water	/	1 mg/L
phthalic anhydride	water, intermittent release	fresh water	5.6 mg/L
phthalic anhydride	marine water	/	0.1 mg/L
phthalic anhydride	water treatment plant	/	10 mg/L
phthalic anhydride	fresh water sediment	dry weight	3.8 mg/kg
phthalic anhydride	marine water sediment	dry weight	0.38 mg/kg
phthalic anhydride	soil	dry weight	0.173 mg/kg
cobalt bis(2-ethylhexanoate)	fresh water	/	1.06 µg/L
cobalt bis(2-ethylhexanoate)	marine water	/	2.36 µg/L
cobalt bis(2-ethylhexanoate)	water treatment plant	/	0.37 mg/L
cobalt bis(2-ethylhexanoate)	fresh water sediment	dry weight	53.8 mg/kg
cobalt bis(2-ethylhexanoate)	marine water sediment	dry weight	69.8 mg/kg
cobalt bis(2-ethylhexanoate)	soil	dry weight	10.9 mg/kg
styrene	fresh water	/	0.028 mg/L
styrene	marine water	/	0.0028 mg/L
styrene	water, intermittent release	/	0.04 mg/L

styrene	fresh water sediment	/	0.614 mg/kg
styrene	marine water sediment	/	0.0614 mg/kg
styrene	water treatment plant	/	5 mg/L
styrene	soil	/	0.2 mg/kg dw

## 8.2 Exposure controls

### Appropriate engineering control

#### Substance/mixture related measures to prevent exposure during identified uses

Handle in accordance with good industrial hygiene and safety practice. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/aerosols.

#### Structural measures to prevent exposure

No information.

#### Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse.

#### Technical measures to prevent exposure

Apply technical measures necessary in order not to exceed the occupational exposure limit. Provide good ventilation and local exhaust in areas with increased concentration. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment. Keep away from food, drink and animal feeding stuffs.

#### Personal protective equipment

##### Eye and face protection

Safety glasses with side protection (BS EN ISO 16321-1:2022). Do not use contact lenses.

##### Hand protection

Protective gloves (BS EN ISO 374). Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately.

#### Appropriate materials

Material	Thickness	Penetration Time	Remark
Neoprene	/	/	BS EN ISO 374
Nitrile	/	/	BS EN ISO 374
Viton (fluorinated rubber)	/	/	BS EN ISO 374
PVA	/	/	BS EN ISO 374

#### Skin protection

Protective antistatic clothing BS EN 1149 (1:2006, 2:1997 and 3:2004, 5:2018), protective antistatic shoes (BS EN ISO 20345:2022+A1:2024). Choose body protection according to the activity and possible exposure.

#### Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (BS EN 136) with filter A2-P3 (BS EN 14387). APF 40 < 1 hour. APF 200 > 1 hour.

#### Thermal hazards

No information.

#### Environmental exposure controls

##### Substance/mixture related measures to prevent exposure

No information.

##### Instruction measures to prevent exposure

No information.

##### Organisational measures to prevent exposure

No information.

##### Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

## 9.1 Information on basic physical and chemical properties

### Important health, safety and environmental information

Physical state	liquid
Shape	No information.
Colour	according to specification pink blue
Odour	No information.
Odour threshold	0.15 ppm (styrene)
Melting/freezing point	-30 °C (styrene)
Boiling point or initial boiling point and boiling range	145 °C (styrene )
Flammability	No information.
Lower and upper explosion limit	0.9 — 1.1 % v/v (lower explosion limit) 6.1 — 6.8 % v/v (Upper explosion limit)
Flash point	31 °C (styrene)
Auto-ignition temperature	490 °C (styrene )
Decomposition temperature	No information.
pH	No information.
Viscosity (dynamic)	450 — 650 mPas at 23 °C (Brookfield RVT)
Viscosity (kinematic)	409 — 591 mm <sup>2</sup> /s at 23 °C (Brookfield RVT)
Solubility (Water)	insoluble
Solubility (Organic solvent)	Soluble in most organic solvents
Partition coefficient n-octanol/water (log value)	3
Vapour pressure	6 hPa at 20 °C
Density	1.1 — 1.15 g/cm <sup>3</sup> at 20 °C
Relative vapour density	3.6 (air=1 (styrene))
Particle characteristics	No information.

## 9.2 Other information

Information with regard to physical hazard classes

No information.

Other safety characteristics

No information.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Product may ignite and burn at temperatures exceeding the flash point.

### 10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

### 10.3 Possibility of hazardous reactions

Vapours and air can form flammable or explosive mixtures. The risk of polymerization.

### 10.4 Conditions to avoid

Protect from heat, direct sunlight, open fire, sparks. Take precautionary measures against static discharges.

## 10.5 Incompatible materials

Peroxide. Strong oxidising agents. Reducing agents.

## 10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released. Carbon dioxide; Carbon monoxide.

# SECTION 11: TOXICOLOGICAL INFORMATION

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

### (a) Acute toxicity

#### For product

Exposure route	Type	Species	Time	Value	Method	Remark
inhalation (vapours)	ATE	/	/	> 20 mg/l	/	calculated value

#### For components

Name	Exposure route	Type	Species	Time	Value	Method	Remark
Synthetic amorphous silica, fumed, crystalline free	oral	LD <sub>50</sub>	rat	/	> 5000 mg/kg bw	OECD 401	/
Synthetic amorphous silica, fumed, crystalline free	dermal	LD <sub>50</sub>	rabbit	/	> 5000 mg/kg	/	/
Synthetic amorphous silica, fumed, crystalline free	inhalation	LC <sub>50</sub>	rat	4 h	> 0.14 mg/l	OECD 403	/
phthalic anhydride	oral	LD <sub>50</sub>	rat	/	1530 mg/kg bw	/	/
phthalic anhydride	dermal	LD <sub>50</sub>	rabbit	/	> 3160 mg/kg bw	/	/
phthalic anhydride	inhalation	LC <sub>50</sub>	rat	4 h	> 2.14 mg/l	OECD 403	/
cobalt bis(2-ethylhexanoate)	oral	LD <sub>50</sub>	rat	/	3129 mg/kg bw	OECD 425	/
cobalt bis(2-ethylhexanoate)	dermal	LD <sub>50</sub>	rat	/	> 2000 mg/kg bw	OECD 402	/
styrene	oral	LD <sub>50</sub>	rat	/	5000 mg/kg	/	/
styrene	dermal	LD <sub>50</sub>	rat	24 h	> 2000 mg/kg	OECD 402	/
styrene	inhalation (vapours)	LC <sub>50</sub>	rat	4 h	11.8 mg/l	/	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	oral	LD <sub>50</sub>	rat	/	> 15000 mg/kg	Test(s) equivalent or similar to OECD Guideline 401	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	inhalation	LC <sub>50</sub>	rat	/	> 13.1 mg/l	Equivalent or similar to OECD Guideline 403.	/

#### Additional information

The product is not classified as acutely toxic. Inhalation of vapors can be harmful.

### (b) Skin corrosion/irritation

#### For components

Name	Species	Time	result	Method	Remark
Synthetic amorphuos silica, fumed, crystalline free	rabbit	/	Non-irritant.	OECD 404	/
phthalic anhydride	rabbit	/	Irritating.	OECD 404	/
cobalt bis(2-ethylhexanoate)	/	/	Non corrosive.	OECD 431/EU Method B.40	in vitro
styrene	rabbit	/	Irritating.	in vivo	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	rabbit	/	Non-irritant.	OECD 404; in vivo	/

**Additional information**

Causes skin irritation.

**(c) Serious eye damage/irritation****For components**

Name	Exposure route	Species	Time	result	Method	Remark
Synthetic amorphuos silica, fumed, crystalline free	/	rabbit	/	Non-irritant.	OECD 405	/
phthalic anhydride	/	rabbit	/	Irritating.	Draize test	/
cobalt bis(2-ethylhexanoate)	/	/	/	moderately irritating	OECD 437, EU B.47	/
cobalt bis(2-ethylhexanoate)	/	rabbit	/	Irritating.	OECD 405	/
styrene	/	rabbit	/	Irritating.	in vivo	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	/	rabbit	/	Non-irritant.	OECD 405; in vivo	/

**Additional information**

Causes serious eye irritation.

**(d) Respiratory or skin sensitisation****For components**

Name	Exposure route	Species	Time	result	Method	Remark
Synthetic amorphuos silica, fumed, crystalline free	dermal	/	/	Non sensitising.	/	/
phthalic anhydride	dermal	guinea pig	/	Sensitizing.	OECD 406	/
phthalic anhydride	inhalation	guinea pig	/	Sensitizing.	/	/
cobalt bis(2-ethylhexanoate)	dermal	mouse	/	May cause sensitisation by skin contact.	OECD 429	/
styrene	dermal	/	/	Non sensitising.	/	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	dermal	guinea pig	/	Non sensitising.	OECD 406	in vivo

**Additional information**

It contains at least one ingredient that can cause sensitisation. Can cause allergic reaction.

**(e) (Germ cell) mutagenicity****For components**

Name	Type	Species	Time	result	Method	Remark
Synthetic amorphuos silica, fumed, crystalline free	in-vitro mutagenicity	Bacteria	/	Negative.	OECD 471	Gene Mutation

Synthetic amorphous silica, fumed, crystalline free	in-vitro mutagenicity	Cell: Mammalian-Animal	/	Negative.	OECD 476	/
Synthetic amorphous silica, fumed, crystalline free	in-vitro mutagenicity	Cell: Mammalian-Animal	/	Negative.	OECD 473; chromosome aberrations test	/
Synthetic amorphous silica, fumed, crystalline free	in-vivo mutagenicity	rat	/	Negative.	/	/
phthalic anhydride	in-vitro mutagenicity	Bacteria ( <i>S. typhimurium</i> )	/	Negative.	OECD 471	/
phthalic anhydride	in-vitro mutagenicity	<i>Escherichia coli</i>	/	Negative.	OECD 471	/
phthalic anhydride	in-vitro mutagenicity	Cell: Mammalian-Animal	/	Negative.	OECD 476	/
phthalic anhydride	in-vitro mutagenicity	Cell: Mammalian-Animal	/	Equivocal	OECD 473	Chromosome aberration assay
cobalt bis(2-ethylhexanoate)	in-vitro mutagenicity	<i>S. typhimurium</i> TA 1535, TA 1537, TA 98, TA100 and TA 102	/	Negative.	OECD 471	Read across
cobalt bis(2-ethylhexanoate)	in-vitro mutagenicity	mouse	/	Negative.	OECD 476	Read-across
cobalt bis(2-ethylhexanoate)	in-vivo mutagenicity	rat	/	Negative.	OECD 474, 475	Read-across
styrene	in-vitro mutagenicity	<i>Salmonella typhimurium</i>	/	Ambiguous.	OECD 471	/
styrene	in-vitro mutagenicity	hamster	/	Ambiguous.	OECD 476	/
styrene	in-vitro mutagenicity	/	/	chromosome aberration: positive	OECD 473, 479	/
styrene	in-vivo mutagenicity	mouse	/	Negative.	OECD 474, 486	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	in-vitro mutagenicity	<i>Salmonella typhimurium</i>	/	Negative.	Similar to OECD 471	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	in-vitro mutagenicity	Cell: Mammalian-Animal	/	Negative.	Similar to OECD 473	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	in-vivo mutagenicity	mouse	/	Negative.	Similar to OECD 474, 475	/

## (f) Carcinogenicity

## For components

Name	Exposure route	Type	Species	Time	Value	result	Method	Remark
Synthetic amorphous silica, fumed, crystalline free	oral	NOAEL	rat	/	1800 - 3200 mg/kg bw/day	Negative.	OECD 453	/
phthalic anhydride	oral	NOAEL	mouse	72 weeks	1785 - 3570 mg/kg bw/day	/	/	/
phthalic anhydride	oral	NOAEL	rat	105 weeks	1000 mg/kg bw/day	/	/	/
styrene	inhalation	NOAEC	rat	/	≥ 4.34 mg/l	Negative	OECD 453	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	inhalation	NOAEC	rat (female)	/	≥ 2000 mg/m3	Negative	Similar to OECD 453	/

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	inhalation	NOAEC	rat (male)	/	138 mg/m3	Negative	Similar to OECD 453	/
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**(g) Reproductive toxicity****For product**

Reproductive toxicity type	Type	Species	Time	Value	result	Method	Remark
/	/	/	/	/	Suspected of damaging the unborn child.	/	/

**For components**

Name	Reproductive toxicity type	Type	Species	Time	Value	result	Method	Remark
Synthetic amorphous silica, fumed, crystalline free	Reproductive toxicity	NOAEL	rat	/	497 mg/kg bw/day	Negative.	OECD 415	oral
Synthetic amorphous silica, fumed, crystalline free	Maternal toxicity	NOAEL	rat	/	1350 mg/kg bw/day	Negative.	OECD 414	oral
Synthetic amorphous silica, fumed, crystalline free	Teratogenicity	NOAEL	rat	/	1350 mg/kg bw/day	Negative.	OECD 414	oral
phthalic anhydride	Reproductive toxicity	NOAEL	mouse	72 weeks	1785 - 3570 mg/kg bw/day	Negative.	/	oral
phthalic anhydride	Reproductive toxicity	NOAEL	rat	105 weeks	1000 mg/kg bw/day	Negative.	/	/
phthalic anhydride	Maternal toxicity	NOAEL	rat	/	1000 mg/kg bw/day	Positive.	/	Oral; Read across.
phthalic anhydride	Teratogenicity	NOAEL	rat	/	1700 mg/kg bw/day	Positive.	/	Oral; Read across.
cobalt bis(2-ethylhexanoate)	Reproductive toxicity	NOAEL/NOEL	rat	28 days	30 mg/kg bw/day	Positive.	OECD 422	oral, read across
styrene	Effects on fertility	NOAEL	rat	60 days	100 - 200 mg/kg bw/day	Positive.	/	inhalation
styrene	Maternal toxicity	NOAEC	rat	50 days	1.08 - 2.15 mg/L	Positive.	/	inhalation
styrene	Maternal toxicity	LOAEC	rat	15 days	1.28 mg/L	Positive.	OECD 414	Inhalation
styrene	Developmental toxicity	NOAEC	rat	15 days	≥ 2.56 mg/L	Negative.	OECD 414	inhalation
styrene	Effects on fertility	NOAEL	rat	60 days	200 - 400 mg/kg bw/day	Positive.	OECD 422	/
styrene	Reproductive toxicity	NOAEC (P/F1)	rat	/	0.64 mg/L	Negative.	OECD 416	/
styrene	Reproductive toxicity	LOAEC	rat	/	2.13 mg/L	Negative.	OECD 416	/
styrene	Reproductive toxicity	NOAEC (F2)	rat	/	0.21 mg/L	Negative.	OECD 416	/
styrene	Reproductive toxicity	LOAEC (F2)	rat	70 days	0.64 mg/L	Negative.	OECD 416	/
styrene	Maternal toxicity	NOAEC	rat	18 days	2.56 mg/L	Negative.	OECD 414	inhalation

hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Developmental toxicity	NOAEC (F1)	rat	/	1720 mg/m <sup>3</sup>	Negative.	Similar to OECD 421	Inhalation
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Maternal toxicity	NOAEL	rat	/	≥ 5220 mg/m <sup>3</sup>	Negative.	Similar to OECD 414	Inhalation
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Developmental toxicity	NOAEC	rat	/	≥ 5220 mg/m <sup>3</sup>	Negative.	OECD 414	Inhalation

#### Summary of evaluation of the CMR properties

Suspected of damaging the unborn child. The chemical is not classified as mutagenic or carcinogenic.

#### (h) STOT-single exposure

No information.

#### Additional information

May cause respiratory irritation. Accidental ingestion may cause gastric disturbances (nausea, vomiting, stomach pain).

#### (i) STOT-repeated exposure

##### For product

Exposure route	Type	Species	Time	Exposure	organ	Value	result	Method	Remark
inhalation	/	/	/	/	Central nervous system, hearing organs	/	Causes damage to organs through prolonged or repeated exposure.	/	/

##### For components

Name	Exposure route	Type	Species	Time	Exposure	organ	Value	result	Method	Remark
Synthetic amorphous silica, fumed, crystalline free	oral	NOEL	rat	90 days	/	/	4000 - 4500 mg/kg bw/day	/	OECD 408	/
Synthetic amorphous silica, fumed, crystalline free	inhalation	NOEC	rat	90 days	/	/	≤ 1.3 mg/m <sup>3</sup>	/	OECD 413	/
Synthetic amorphous silica, fumed, crystalline free	dermal	NOAEL	rabbit	/	/	/	≥ 10000 mg/kg bw/day	/	/	/
phthalic anhydride	oral	NOAEL	rat	7 weeks	/	/	1250 mg/kg bw/day	/	/	/
phthalic anhydride	oral	LOAEL	rat	7 weeks	/	/	2500 mg/kg bw/day	/	/	/
phthalic anhydride	oral	NOAEL	rat	105 weeks	/	Heart, kidneys, liver	500 mg/kg bw/day	/	/	/
phthalic anhydride	oral	LOAEL	mouse	72 weeks	/	/	1717 - 2340 mg/kg bw/day	/	/	/

cobalt bis(2-ethylhexanoate)	oral	NOAEL	rat	90 days	/	/	3 mg/kg bw/day	/	OECD 408	read-across
styrene	inhalation	NOAEC	rat, mouse (male)	28 days	/	/	3.47 mg/L	/	OECD 412	/
styrene	inhalation	NOAEC	rat, mouse	28 days	/	/	2.13 mg/L	/	OECD 412	ototoxicity
styrene	inhalation	NOAEC	rat, mouse	28 days	/	/	0.181 - 0.688 mg/L	/	OECD 412	/
styrene	inhalation	NOAEC	rat	/	/	Nasal epithelium	0.85 mg/L	/	/	/
styrene	inhalation	NOAEC	rat	/	/	/	2.13 mg/L	/	/	/
styrene	inhalation	NOAEC	rat	/	/	/	0.85 mg/L	/	/	ototoxicity
styrene	inhalation	LOAEC	rat	/	/	/	3.14 mg/L	/	/	ototoxicity
styrene	oral	NOAEL	rat	/	/	/	1000 mg/kg bw/day	/	/	Read-across
styrene	oral	LOAEL	rat	/	/	/	2000 mg/kg bw/day	/	/	/
styrene	oral	NOAEL	mouse	/	/	/	150 mg/kg bw/day	/	/	/
styrene	oral	LOAEL	mouse	/	/	/	300 mg/kg bw/day	/	/	/
styrene	inhalation	LOAEC	rat	/	/	/	0.21 mg/m <sup>3</sup>	/	OECD 453	local effects
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	oral	NOAEL	rat (female)	30 days	/	/	1056 mg/kg bw	/	Similar to OECD 408	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	oral	LOAEL	rat (male)	30 days	/	/	116 mg/kg bw	/	Similar to OECD 408	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	inhalation	NOAEC	rat (female)	/	/	/	3950 mg/m <sup>3</sup>	/	Similar to OECD 413	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	inhalation	LOAEC	rat (male)	/	/	general	1975 mg/m <sup>3</sup>	/	Similar to OECD 413	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	inhalation	LOAEC	rat (female)	/	/	/	7400 mg/m <sup>3</sup>	/	Similar to OECD 413	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	dermal	NOAEL	rat	/	/	/	≥ 495 mg/kg bw/day	/	Similar to OECD 411	systemic effects

**Additional information**

Causes damage to organs through prolonged or repeated exposure.

**(j) Aspiration hazard**

No information.

**Additional information**

Aspiration hazard: Not classified. Due to viscosity, this product does not present an aspiration hazard.

**Symptoms related to the physical, chemical and toxicological characteristics**

No information.

**Interactive effects**

No information.

**11.2 Information on other hazards****Endocrine disrupting properties****For product**

No data.

**Other information**

No information.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity****Acute (short-term) toxicity****For components**

Name	Type	Value	Exposure time	Species	organism	Method	Remark
Synthetic amorphuous silica, fumed, crystalline free	EL <sub>50</sub>	≥ 1000 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	/
Synthetic amorphuous silica, fumed, crystalline free	LC <sub>50</sub>	> 10000 mg/L	96 h	fish	<i>Brachydanio rerio</i>	OECD 203	/
phthalic anhydride	EC <sub>50</sub>	68 mg/L	72 h	algae	<i>Pseudokirchneriel la subcapitata</i>	OECD 201	/
phthalic anhydride	NOEC	32 mg/L	72 h	algae	<i>Pseudokirchneriel la subcapitata</i>	OECD 201	/
phthalic anhydride	EC <sub>50</sub>	71 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	/
phthalic anhydride	LC <sub>50</sub>	> 99 mg/L	96 h	fish	<i>Oryzias latipes</i>	OECD 203	/
phthalic anhydride	EC <sub>50</sub>	> 1000 mg/L	3 h	bacteria	Activated sludge	ISO 8192	/
phthalic anhydride	EC <sub>50</sub>	13 mg/L	16 h	bacteria	<i>Pseudomonas putida</i>	ISO 10712	/
phthalic anhydride	EC <sub>50</sub>	731 mg/L	/	terrestrial plants	<i>Lactuca sativa</i>	/	/
cobalt bis(2-ethylhexanoate)	LC <sub>50</sub>	1.512 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
cobalt bis(2-ethylhexanoate)	NOEC	0.939 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
cobalt bis(2-ethylhexanoate)	LOEC	1.577 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	ASTM guideline (1996)	/
cobalt bis(2-ethylhexanoate)	EC <sub>50</sub>	0.144 mg/L	72 h	algae	<i>Pseudokirchneriel la subcapitata</i>	/	/
cobalt bis(2-ethylhexanoate)	NOEC	0.0322 mg/L	72 h	algae	<i>Pseudokirchneriel la subcapitata</i>	/	/
cobalt bis(2-ethylhexanoate)	LOEC	0.0527 mg/L	72 h	algae	<i>Pseudokirchneriel la subcapitata</i>	OECD 201	/
cobalt bis(2-ethylhexanoate)	EC <sub>10</sub>	3.73 mg/L	30 min	activated sludge	/	/	/

cobalt bis(2-ethylhexanoate)	EC <sub>50</sub>	120 mg/L	30 min	activated sludge	/	OECD 209	read-across
styrene	EC <sub>50</sub>	4.9 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	EPA OTS 797.1050	/
styrene	EC <sub>50</sub>	4.7 mg/L	48 h	crustacea	<i>Daphnia magna</i>	/	/
styrene	NOEC	1.9 mg/L	/	crustacea	<i>Daphnia magna</i>	OECD 202	/
styrene	LC <sub>50</sub>	4.02 - 10 mg/L	96 h	fish	<i>Pimephales promelas</i>	OECD 203	/
styrene	EC <sub>50</sub>	500 mg/L	30 min	bacteria	Activated sludge	OECD 209	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	EL <sub>50</sub>	4.1 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	NOELR	0.76 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	EL <sub>50</sub>	10 - 22 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	LL <sub>50</sub>	10 - 30 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	OECD 203	/

### Chronic (long-term) toxicity For components

Name	Type	Value	Exposure time	Species	organism	Method	Remark
phthalic anhydride	NOEC	16 - 42 mg/l	21 days	crustaceans	<i>Daphnia magna</i>	OECD 211	/
phthalic anhydride	LC <sub>50</sub>	560 mg/l	7 days	fish	<i>Danio rerio</i>	OECD 210	/
phthalic anhydride	LOEC	32 mg/l	60 days	fish	<i>Danio rerio</i>	OECD 210	/
phthalic anhydride	NOEC	10 mg/l	60 days	fish	<i>Danio rerio</i>	OECD 210	/
cobalt bis(2-ethylhexanoate)	EC <sub>50</sub>	0.0901 mg/l	7 days	aquatic plants	<i>Lemna minor</i>	/	/
cobalt bis(2-ethylhexanoate)	NOEC	0.003 mg/l	7 days	aquatic plants	<i>Lemna minor</i>	/	/
cobalt bis(2-ethylhexanoate)	LOEC	0.0088 mg/l	7 days	aquatic plants	<i>Lemna minor</i>	OECD 221	/
cobalt bis(2-ethylhexanoate)	NOEC <sub>r</sub>	0.0608 mg/l	21 days	crustacea	<i>Daphnia magna</i>	/	/
cobalt bis(2-ethylhexanoate)	LC <sub>50</sub>	0.1213 mg/l	21 days	crustacea	<i>Daphnia magna</i>	/	/
cobalt bis(2-ethylhexanoate)	LOEC <sub>R</sub>	0.0933 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 211	/
styrene	NOEC	1.01 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 203	/
styrene	LOEC	2.06 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 203	/
styrene	EC <sub>50</sub>	1.88 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 203	/
styrene	LC <sub>50</sub>	120 mg/kg soil dw	14 days	invertebrate	<i>Eisenia fetida</i>	OECD 207	/
styrene	LOEC	65 mg/kg soil dw	/	invertebrate	<i>Eisenia fetida</i>	OECD 207	burrowing time and mean percent weight change

styrene	LOEC	180 mg/kg soil dw	/	invertebrate	<i>Eisenia fetida</i>	OECD 207	survival
styrene	NOEC	34 mg/kg soil dw	/	invertebrate	<i>Eisenia fetida</i>	OECD 207	mean percent weight change
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	EC50	0.328 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 211	/

## 12.2 Persistence and degradability

### Abiotic degradation, physical- and photo-chemical elimination

No information.

### Biodegradation

#### For components

Name	Type	Rate	Time	Evaluation	Method	Remark
phthalic anhydride	biodegradability	68 %	10 days	readily biodegradable	OECD 301 D	/
phthalic anhydride	biodegradability	74 %	30 days	readily biodegradable	OECD 301 D	/
cobalt bis(2-ethylhexanoate)	biodegradation	> 60 %	10 days	readily biodegradable	OECD 301 B	/
styrene	biodegradability	87 %	20 days	readily biodegradable	Similar to OECD 301D	/
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	biodegradation	74.7 %	28 days	readily biodegradable	OECD 301F	Activated sludge, domestic, non-adapted

## 12.3 Bioaccumulative potential

### Partition coefficient n-octanol/water (log value)

#### For product

Value	Temperature °C	pH	Concentration	Method
3	/	/	/	/

#### For components

Name	Value	Temperature °C	pH	Concentration	Method
phthalic anhydride	1.6	/	/	/	/
styrene	3	/	/	/	/

### Bioconcentration factor (BCF)

#### For components

Name	Species	organism	Value	Duration	Evaluation	Method	Remark
phthalic anhydride	/	/	3.16 - 3.4	/	/	/	/
styrene	/	/	74	/	/	/	Calculated value

## 12.4 Mobility in soil

### Known or predicted distribution to environmental compartments

No information.

### Surface tension

No information.

### Adsorption/Desorption

#### For components

Name	Type	Criterion	Value	Evaluation	Method	Remark
phthalic anhydride	Soil	/	31	/	/	Koc
styrene	Soil	log KOC	2.55	/	/	/

### 12.5 Results of PBT and vPvB assessment

The components in this product do not meet the criteria for classification as PBT or vPvB.

### 12.6 Endocrine disrupting properties

For product

No data.

### 12.7 Other adverse effects

No information.

### 12.8 Additional information

For product

Harmful to aquatic life with long lasting effects. Do not allow to reach ground water, water courses or sewage system.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Product / Packaging disposal

Waste chemical

Do not allow product to reach drains/sewage systems. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste. Dispose of in accordance with applicable waste disposal regulation.

Waste codes / waste designations according to LoW

No information.

Packaging

Deliver completely emptied containers to approved waste disposal authorities. Dispose of in accordance with applicable waste disposal regulation. Emptied container is suitable for recycling.

Waste codes / waste designations according to LoW

No information.

Waste treatment-relevant information

No information.

Sewage disposal-relevant information





No information.

Other disposal recommendations

No information.

## SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
14.1 UN number or ID number			
UN 1866	UN 1866	UN 1866	UN 1866

14.2 UN proper shipping name			
RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION
14.3 Transport hazard class(es)			
3	3	3	3
			
14.4 Packing group			
III	III	III	III
14.5 Environmental hazards			
NO	NO	NO	NO
14.6 Special precautions for user			
Limited quantities 5 L Packing Instructions P001, IBC03, LP01, R001 Special packing provisions PP1 Transport category 3 Tunnel restriction code (D/E) Classification code F1	Limited quantities 5 L EmS F-E, <del>S-E</del> Flash point 31 °C	Limited Quantity, Packing Instructions (Ltd Qty, Pkg Inst) Y344 Limited Quantity, Maximum Net Quantity/Package (Ltd Qty, Max Net Qty/Pkg) 10 L Packing Instructions (Pkg Inst) 355 Maximum Net Quantity/Package (Max Net Qty/Pkg) 25 L Special provisions A3	Limited quantities 5 L
14.7 Maritime transport in bulk according to IMO instruments			
	Goods may not be carried in bulk in bulk containers, containers or vehicles.		

## SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)  
not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents

No information.

#### Special instructions

Observe the regulations on employment and protection against dangerous substances for young people, pregnant women and nursing mothers. Regulation (EC) No. 1907/2006 (REACH) Annex XVII - Terms of restriction: 3, 40. Seveso P5c: FLAMMABLE LIQUIDS.

## 15.2 Chemical Safety Assessment

The chemical safety assessment has been made.

## SECTION 16: OTHER INFORMATION

### Indication of changes

2.1 Classification of the substance or mixture 2.2 Label elements 3.2 Mixtures 5.1 Extinguishing media 8.2 Exposure controls 9.1 Information on basic physical and chemical properties 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Key literature references and sources for data

No information.

### Abbreviations and acronyms

ATE - Acute Toxicity Estimate  
 ADR - Agreement concerning the International Carriage of Dangerous Goods by Road  
 ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 CEN - European Committee for Standardisation  
 C&L - Classification and Labelling  
 CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  
 CAS# - Chemical Abstracts Service number  
 CMR - Carcinogen, Mutagen, or Reproductive Toxicant  
 CSA - Chemical Safety Assessment  
 CSR - Chemical Safety Report  
 DMEL - Derived Minimal Effect Level  
 DNEL - Derived No Effect Level  
 DPD - Dangerous Preparations Directive 1999/45/EC  
 DSD - Dangerous Substances Directive 67/548/EEC  
 DU - Downstream User  
 EC - European Community  
 ECHA - European Chemicals Agency  
 EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)  
 EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)  
 EEC - European Economic Community  
 EINECS - European Inventory of Existing Commercial Substances  
 ELINCS - European List of notified Chemical Substances  
 EN - European Standard  
 EQS - Environmental Quality Standard  
 EU - European Union  
 Euphrac - European Phrase Catalogue  
 EWC - European Waste Catalogue (replaced by LoW – see below)  
 GES - Generic Exposure Scenario  
 GHS - Globally Harmonized System  
 IATA - International Air Transport Association  
 ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air  
 IMDG - International Maritime Dangerous Goods  
 IMSBC - International Maritime Solid Bulk Cargoes  
 IT - Information Technology  
 IUCLID - International Uniform Chemical Information Database  
 IUPAC - International Union for Pure Applied Chemistry  
 JRC - Joint Research Centre  
 Kow - octanol-water partition coefficient  
 LC50 - Lethal Concentration to 50 % of a test population  
 LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
 LE - Legal Entity  
 LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)  
 LR - Lead Registrant  
 M/I - Manufacturer / Importer  
 MS - Member States  
 MSDS - Material Safety Data Sheet  
 OC - Operational Conditions  
 OECD - Organization for Economic Co-operation and Development

OEL - Occupational Exposure Limit  
OJ - Official Journal  
OR - Only Representative  
OSHA - European Agency for Safety and Health at work  
PBT - Persistent, Bioaccumulative and Toxic substance  
PEC - Predicted Effect Concentration  
PNEC(s) - Predicted No Effect Concentration(s)  
PPE - Personal Protection Equipment  
(Q)SAR - Qualitative Structure Activity Relationship  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
RIP - REACH Implementation Project  
RMM - Risk Management Measure  
SCBA - Self-Contained Breathing Apparatus  
SDS - Safety data sheet  
SIEF - Substance Information Exchange Forum  
SME - Small and Medium sized Enterprises  
STOT - Specific Target Organ Toxicity  
(STOT) RE - Repeated Exposure  
(STOT) SE - Single Exposure  
SVHC - Substances of Very High Concern  
UN - United Nations  
vPvB - Very Persistent and Very Bioaccumulative

#### List of relevant H phrases

H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H360FD May damage fertility. May damage the unborn child.  
H361d Suspected of damaging the unborn child.  
H372 Causes damage to organs through prolonged or repeated exposure (inhalation).  
H400 Very toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
EUH066 Repeated exposure may cause skin dryness or cracking.

#### Training advice

Ensure adequate training of the persons responsible for the use of chemicals.