Safety Data Sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)

Transition document following GB exit from the EU

Synmar Alexius II D

Version number: 2.0
Replaces version of: 2021-11-26 (1)

Revision: 2024-05-17

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

1.1 Product identifier

Trade name **Synmar Alexius II D**

Article number S300153

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

Relevant identified uses

Transmission oil
Professional use
Consumer use

1.3 Details of the supplier of the safety data sheet

Synmar B.V.
Albert Schweitzerstraat 7
7131 PG Lichtenvoorde
Netherlands

Telephone: +31 (0) 33 303 3044
e-mail: info@synmar.nl
Website: www.synmar.nl

e-mail (competent person) info@synmar.nl

1.4 Emergency telephone number

Emergency information service

+31 (0) 33 303 3044
This number is only available during the following office hours: Mon-Fri 09:00 - 17:00

Poison centre

Country	Name	Telephone
United Kingdom	National Poisons Information Service (NPIS)	0344-8920111 (medical professionals only)
United Kingdom	NHS (general public)	non-emergency: 111 or a doctor; emergency: 999

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (acc. to GB CLP)

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.16	substance or mixture corrosive to metals	1	Met. Corr. 1	H290

For full text of H-phrases: see SECTION 16

Code	Supplemental hazard information
EUH208	contains Amines, C12-14-tert-alkyl, Sulfonic acids, petroleum, calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts, 5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione. May produce an allergic reaction

2.2 Label elements

Labelling (acc. to GB CLP)

- signal word Warning

- pictograms

GHS05

- hazard statements

H290	May be corrosive to metals.

- precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P234	Keep only in original packaging.
P390	Absorb spillage to prevent material damage.
P406	Store in a corrosion-resistant container with a resistant inner liner.

- supplemental hazard information

EUH208 Contains Amines, C12-14-tert-alkyl, Sulfonic acids, petroleum, calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts, 5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione. May produce an allergic reaction.

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0,1%.

Endocrine disrupting properties

Contains an endocrine disruptor (ED) at a concentration of ≥ 0,1%. (Section 11 & 12).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

The product does not contain any other ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Very highly refined mineral oil (mixture)		15 – 30	Asp. Tox. 1 / H304		L(b)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	CAS No 68584-23-6 EC No 271-529-4	< 10	Acute Tox. 4 / H332 Skin Sens. 1B / H317		
Sulfonic acids, petroleum, calcium salts	CAS No 61789-86-4 EC No 263-093-9	< 10	Acute Tox. 4 / H332 Skin Sens. 1B / H317		
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	CAS No 72676-55-2 EC No 276-763-0	< 1	Skin Sens. 1 / H317 Aquatic Chronic 2 / H411		

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Amines, C12-14-tert-alkyl	CAS No 68955-53-3 EC No 273-279-1	< 1	Met. Corr. 1 / H290 Acute Tox. 4 / H302 Acute Tox. 3 / H311 Acute Tox. 2 / H330 Skin Corr. 1C / H314 Eye Dam. 1 / H318 Skin Sens. 1 / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410		
2,6-di-tert-butyl-p-cresol	CAS No 128-37-0 EC No 204-881-4	> 0.08 – < 0.2	Aquatic Chronic 1 / H410		

Notes

L(b): The classification as a carcinogen is not required. The substance contains less than 3 % DMSO extract

Name of substance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
Sulfonic acids, petroleum, calcium salts	CAS No 61789-86-4 EC No 263-093-9	Skin Sens. 1B; H317: C ≥ 10 %	-	>1.9 mg/l/4h	inhalation: dust/mist
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	CAS No 68584-23-6 EC No 271-529-4	Skin Sens. 1B; H317: C ≥ 10 %	-	>1.9 mg/l/4h	inhalation: dust/mist
Amines, C12-14-tert-alkyl	CAS No 68955-53-3 EC No 273-279-1	-	-	500 mg/kg 300 mg/kg 0.5 mg/l/4h	oral dermal inhalation: vapour

Remarks

For full text of H-phrases: see SECTION 16. All the percentages given are percentages by weight unless stated otherwise.
Very highly refined mineral oil (mixture) may contain one or more of the following (CAS number, EC number, REACH registration number): 101316-70-5, 309-875-6; 101316-71-6, 309-876-1; 101316-72-7, 309-877-7, 01-2119489969-06; 64741-88-4, 265-090-8, 01-2119488706-23; 64741-89-5, 265-091-3, 01-119487067-30; 64741-95-3, 265-096-0, 01-2119487081-40; 64741-96-4, 265-097-6, 01-2119483621-38; 64742-01-4, 265-101-6, 01-2119488707-21; 64742-45-6, 265-147-7; 64742-52-5, 265-155-0, 01-2119467170-45; 64742-53-6, 265-156-6, 01-2119480375-34; 64742-54-7, 265-157-1, 01-2119484627-25; 64742-56-9, 265-159-2, 01-2119480132-48; 64742-57-0, 265-160-8, 01-2119489287-22; 64741-88-4, 265-090-8, 01-2119488706-23; 64742-62-7, 265-166-0, 01-2119480472-38; 64742-65-0, 265-169-7, 01-2119471299-27; 64742-70-7, 265-174-4, 01-2119487080-42; 68037-01-4, 500-183-1, 01-2119486452-34; 111-66-0, 203-893-7, 01-2119486877-14 / 01-2119409094-47; 70693-43-5, 813-310-3; 72623-85-9, 276-736-3, 01-2119555262-43; 72623-86-0, 276-737-9, 01-2119474878-16; 72623-87-1, 276-738-4, 01-2119474889-13; 74869-22-0, 278-012-2, 01-2119495601-36; 8042-47-5, 232-455-8, 01-2119487078-27.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do not induce vomiting unless directed by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed

If inhaled

Irritation.

If on skin

Defatting or cracking of the skin, skin dryness, irritation. May cause an allergic skin reaction.

If in eyes

Redness, irritation.

If swallowed

Gastrointestinal complaints.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the poison centre.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water mist; Foam; Dry extinguishing powder; Carbon dioxide (CO_2);
Co-ordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture

Substance or mixture corrosive to metals. In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products

During fire hazardous fumes/smoke could be produced: carbon monoxide (CO), carbon dioxide (CO_2), phosphorus oxides (P_xO_y), sulphur oxides (SO_x), metal oxides.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area. Special danger of slipping by leaking/spilling product.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Absorb the spillage with an inert, dry material.

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- corrosive conditions

Store in corrosive resistant container with a resistant inner liner.

- flammability hazards

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

- incompatible substances or mixtures

Keep away from alkalis, oxidising substances, acids.

Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight.

Consideration of other advice

Store in a dry place. Keep in a cool place. Store in a well-ventilated place. Keep container tightly closed.

- packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

There is no additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Notation	Source
GB	2,6-di-tert-butyl-p-cresol	128-37-0	WEL		10				EH40/2005

Notation

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Very highly refined mineral oil (mixture)		DNEL	0.97 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Very highly refined mineral oil (mixture)		DNEL	2.73 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Sulfonic acids, petroleum, calcium salts	61789-86-4	DNEL	11.75 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Sulfonic acids, petroleum, calcium salts	61789-86-4	DNEL	3.33 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Sulfonic acids, petroleum, calcium salts	61789-86-4	DNEL	2.9 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
Sulfonic acids, petroleum, calcium salts	61789-86-4	DNEL	1.667 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Sulfonic acids, petroleum, calcium salts	61789-86-4	DNEL	0.833 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	DNEL	11.75 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	DNEL	3.33 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	DNEL	2.9 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	DNEL	1.667 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	DNEL	0.833 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	DNEL	3.29 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	DNEL	0.93 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	DNEL	0.56 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	DNEL	0.33 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	DNEL	0.17 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
2,6-di-tert-butyl-p-cresol	128-37-0	DNEL	1.76 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
2,6-di-tert-butyl-p-cresol	128-37-0	DNEL	0.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2,6-di-tert-butyl-p-cresol	128-37-0	DNEL	0.435 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
2,6-di-tert-butyl-p-cresol	128-37-0	DNEL	0.25 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
2,6-di-tert-butyl-p-cresol	128-37-0	DNEL	0.25 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Sulfonic acids, petroleum, calcium salts	61789-86-4	PNEC	10 mg/l	aquatic organisms	water	intermittent release
Sulfonic acids, petroleum, calcium salts	61789-86-4	PNEC	1 mg/l	aquatic organisms	freshwater	short-term (single instance)
Sulfonic acids, petroleum, calcium salts	61789-86-4	PNEC	1 mg/l	aquatic organisms	marine water	short-term (single instance)
Sulfonic acids, petroleum, calcium salts	61789-86-4	PNEC	1,000 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Sulfonic acids, petroleum, calcium salts	61789-86-4	PNEC	226,000,000 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Sulfonic acids, petroleum, calcium salts	61789-86-4	PNEC	226,000,000 mg/kg	aquatic organisms	marine sediment	short-term (single instance)

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Sulfonic acids, petroleum, calcium salts	61789-86-4	PNEC	271,000,000 mg/kg	terrestrial organisms	soil	short-term (single instance)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	PNEC	10 mg/l	aquatic organisms	water	intermittent release
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	PNEC	1 mg/l	aquatic organisms	freshwater	short-term (single instance)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	PNEC	1 mg/l	aquatic organisms	marine water	short-term (single instance)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	PNEC	1,000 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	PNEC	226,000,000 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	PNEC	226,000,000 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	PNEC	271,000,000 mg/kg	terrestrial organisms	soil	short-term (single instance)
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	PNEC	0.003 mg/l	aquatic organisms	freshwater	short-term (single instance)
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	PNEC	0.31 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	PNEC	0.039 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	PNEC	0.004 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	PNEC	0.166 mg/kg	terrestrial organisms	soil	short-term (single instance)
2,6-di-tert-butyl-p-cresol	128-37-0	PNEC	1.99 µg/l	aquatic organisms	water	intermittent release
2,6-di-tert-butyl-p-cresol	128-37-0	PNEC	0.199 µg/l	aquatic organisms	freshwater	short-term (single instance)
2,6-di-tert-butyl-p-cresol	128-37-0	PNEC	0.02 µg/l	aquatic organisms	marine water	short-term (single instance)
2,6-di-tert-butyl-p-cresol	128-37-0	PNEC	0.017 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2,6-di-tert-butyl-p-cresol	128-37-0	PNEC	0.458 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
2,6-di-tert-butyl-p-cresol	128-37-0	PNEC	0.046 mg/kg	aquatic organisms	marine sediment	short-term (single instance)

Relevant PNECs of components						
Name of substance	**CAS No**	**End-point**	**Threshold level**	**Organism**	**Environmental compartment**	**Exposure time**
2,6-di-tert-butyl-p-cresol	128-37-0	PNEC	0.054 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation. Provide eyewash stations and safety showers at the workplace.

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection

Skin protection

Chemical protective clothing.

Hand protection

Wear suitable gloves. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- type of material

Nitrile rubber

- material thickness

Use gloves with a minimum material thickness: ≥ 0.38 mm.

- breakthrough time of the glove material

Use gloves with a minimum breakthrough time of the glove material: >480 minutes (permeation: level 6).

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Type: ABEK-P2 (combined filters against gases, vapours and particles, colour code: Brown/Grey/Yellow/Green/White).

Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	red
Odour	characteristic
Melting point/freezing point	<35 °C
Boiling point or initial boiling point and boiling range	>300 °C
Evaporation rate	not determined
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	LEL: UEL: not determined
Flash point	>180 °C
Auto-ignition temperature	not determined
Decomposition temperature	no data available
pH (value)	not determined
Kinematic viscosity	37 cSt at 40 °C

Solubility

Water solubility	insoluble

Partition coefficient n-octanol/water (log value)	this information is not available

Vapour pressure	not determined

Density and/or relative density

Density	0.84 $^{g}/_{cm^3}$ at 15 °C
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)

9.2 Other information

There is no additional information.

Information with regard to physical hazard classes	there is no additional information
Other safety characteristics	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

Substance or mixture corrosive to metals.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Oxidisers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
Sulfonic acids, petroleum, calcium salts	61789-86-4	inhalation: dust/mist	>1.9 $^{mg}/_{l}$/4h
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	inhalation: dust/mist	>1.9 $^{mg}/_{l}$/4h
Amines, C12-14-tert-alkyl	68955-53-3	oral	500 $^{mg}/_{kg}$
Amines, C12-14-tert-alkyl	68955-53-3	dermal	300 $^{mg}/_{kg}$
Amines, C12-14-tert-alkyl	68955-53-3	inhalation: vapour	0.5 $^{mg}/_{l}$/4h

Acute toxicity of components

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Sulfonic acids, petroleum, calcium salts	61789-86-4	oral	LD50	>16,000 $^{mg}/_{kg}$	rat
Sulfonic acids, petroleum, calcium salts	61789-86-4	inhalation: dust/ mist	LC50	>1.9 $^{mg}/_{l}$/4h	rat
Sulfonic acids, petroleum, calcium salts	61789-86-4	dermal	LD50	>5,000 $^{mg}/_{kg}$	rabbit
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	oral	LD50	>16,000 $^{mg}/_{kg}$	rat
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	inhalation: dust/ mist	LC50	>1.9 $^{mg}/_{l}$/4h	rat
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	dermal	LD50	>5,000 $^{mg}/_{kg}$	rabbit
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	dermal	LD50	>2,000 $^{mg}/_{kg}$	rabbit
2,6-di-tert-butyl-p-cresol	128-37-0	oral	LD50	>6,000 $^{mg}/_{kg}$	rat
2,6-di-tert-butyl-p-cresol	128-37-0	dermal	LD50	>2,000 $^{mg}/_{kg}$	rat

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Contains Amines, C12-14-tert-alkyl, Sulfonic acids, petroleum, calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts, 5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione. May produce an allergic reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Contains an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

Endocrine Disruptor lists				
Name of substance	**CAS No**	**Endocrine disruptor for human health**	**Endocrine disruptor for the environment**	**Listed in**
2,6-di-tert-butyl-p-cresol	128-37-0	yes		List II

Legend
List II Substances under evaluation for endocrine disruption under an EU legislation

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	**CAS No**	**Endpoint**	**Value**	**Species**	**Exposure time**
Sulfonic acids, petroleum, calcium salts	61789-86-4	LL50	>10,000 mg/l	fish	96 h
Sulfonic acids, petroleum, calcium salts	61789-86-4	EC50	>1,000 mg/l	aquatic invertebrates	48 h
Sulfonic acids, petroleum, calcium salts	61789-86-4	ErC50	>1,000 mg/l	algae	72 h
Sulfonic acids, petroleum, calcium salts	61789-86-4	NOEC	1,000 mg/l	algae	72 h
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	LL50	>10,000 mg/l	fish	96 h
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	EC50	>1,000 mg/l	aquatic invertebrates	48 h
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	ErC50	>1,000 mg/l	algae	72 h
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	NOEC	1,000 mg/l	algae	72 h
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	EC50	>454 mg/l	fish	96 h
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	ErC50	20 mg/l	algae	72 h
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	NOEC	≥454 mg/l	fish	96 h
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	LOEC	6.1 mg/l	aquatic invertebrates	48 h
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	growth rate (ErCx) 10%	9.4 mg/l	algae	72 h
2,6-di-tert-butyl-p-cresol	128-37-0	LC50	>0.57 mg/l	fish	96 h
2,6-di-tert-butyl-p-cresol	128-37-0	EC50	0.48 mg/l	aquatic invertebrates	48 h
2,6-di-tert-butyl-p-cresol	128-37-0	ErC50	>0.4 mg/l	algae	72 h
2,6-di-tert-butyl-p-cresol	128-37-0	NOEC	0.15 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2,6-di-tert-butyl-p-cresol	128-37-0	growth rate (ErCx) 10%	0.4 mg/l	algae	72 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Sulfonic acids, petroleum, calcium salts	61789-86-4	EC50	>10,000 mg/l	microorganisms	3 h
Sulfonic acids, petroleum, calcium salts	61789-86-4	NOAEC	10,000 mg/l	microorganisms	3 h
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	EC50	>10,000 mg/l	microorganisms	3 h
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	NOAEC	10,000 mg/l	microorganisms	3 h
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	NOEC	1 mg/l	microorganisms	3 h
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	growth (EbCx) 10%	3.1 mg/l	microorganisms	3 h
2,6-di-tert-butyl-p-cresol	128-37-0	EC50	0.096 mg/l	aquatic invertebrates	21 d
2,6-di-tert-butyl-p-cresol	128-37-0	NOEC	0.053 mg/l	fish	30 d
2,6-di-tert-butyl-p-cresol	128-37-0	LOEC	0.14 mg/l	fish	30 d

12.2 Persistence and degradability

Expected to be inherently biodegradable.

12.3 Bioaccumulative potential

Not expected to bioaccumulate.

12.4 Mobility in soil

Insoluble in water.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0,1%.

12.6 Endocrine disrupting properties

Contains an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

Endocrine Disruptor lists

Name of substance	CAS No	Endocrine disruptor for human health	Endocrine disruptor for the environment	Listed in
2,6-di-tert-butyl-p-cresol	128-37-0	yes		List II

Legend
List II Substances under evaluation for endocrine disruption under an EU legislation

12.7 Other adverse effects

This product floats on water and may affect the oxygen-balance in the water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	**UN number**	not assigned
14.2	**UN proper shipping name**	not assigned
14.3	**Transport hazard class(es)**	none
14.4	**Packing group**	not assigned
14.5	**Environmental hazards**	non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

No data available.

Additional information for each of the UN Model Regulations

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - additional information

not assigned

International Maritime Dangerous Goods Code (IMDG) - additional information

not assigned

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

not assigned

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Seveso Directive

2012/18/EU (Seveso III)

No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
	not assigned		

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

Water Framework Directive (WFD)

List of pollutants (WFD)

Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
2,6-di-tert-butyl-p-cresol	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		a)	

Legend
a) Indicative list of the main pollutants

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National regulations (GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

None of the ingredients are listed.

Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)

Name	Name acc. to inventory	Conditions of restriction	No
Very highly refined mineral oil (mixture)	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
Amines, C12-14-tert-alkyl	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3

Legend
R3

1. Shall not be used in:
— ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
— tricks and jokes,
— games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
2. Articles not complying with paragraph 1 shall not be placed on the market.
3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
— can be used as fuel in decorative oil lamps for supply to the general public, and,
— present an aspiration hazard and are labelled with R65 or H304,
4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the British Standard Specification on Decorative oil lamps (BS EN 14059) adopted by the British Standards Institute.
5. Without prejudice to the implementation of other legislation relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
(a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010 'Just a sip of lamp oil
— or even sucking the wick of lamps
— may lead to life-threatening lung damage';

Legend

(b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as
follows: 'Just a sip of grill lighter may lead to life-threatening lung damage';
(c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the Agency.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.1	Registration number (REACH): Not relevant (mixture)	
1.2	Relevant identified uses: Transmission oil Professional uses Consumer uses	Relevant identified uses: Transmission oil Professional use Consumer use
1.3	Details of the supplier of the safety data sheet: Synmar B.V. Hogeweg 210 3815 LZ Amersfoort Netherlands Telephone: +31 (0) 33 303 3044 e-mail: info@synmar.nl Website: www.synmar.nl	Details of the supplier of the safety data sheet: Synmar B.V. Albert Schweitzerstraat 7 7131 PG Lichtenvoorde Netherlands Telephone: +31 (0) 33 303 3044 e-mail: info@synmar.nl Website: www.synmar.nl
1.4		Poison centre: change in the listing (table)
2.1	Classification according to Regulation (EC) No 1272/2008 (CLP): This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.	Classification (acc. to GB CLP)
2.1		Classification (acc. to GB CLP): change in the listing (table)
2.1		Classification (acc. to GB CLP): change in the listing (table)
2.2	- signal word: Not required.	- signal word: Warning
2.2	- pictograms: Not required.	- pictograms
2.2		- pictograms: change in the listing (table)
2.2		- hazard statements: change in the listing (table)
2.2		- precautionary statements: change in the listing (table)
2.2		- supplemental hazard information: change in the listing (table)

Section	Former entry (text/value)	Actual entry (text/value)
2.3	Other hazards: There is no additional information.	Other hazards
2.3	Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0,1%.
2.3		Endocrine disrupting properties: Contains an endocrine disruptor (ED) at a concentration of ≥ 0,1%. (Section 11 & 12).
3.2		Mixtures: change in the listing (table)
3.2		Mixtures: change in the listing (table)
4.1	Following ingestion: Rinse mouth with water (only if the person is conscious). Do not induce vomiting unless directed by medical personnel. Call a doctor if you feel unwell.	Following ingestion: Rinse mouth with water (only if the person is conscious). Do not induce vomiting unless directed by medical personnel.
5.2	Special hazards arising from the substance or mixture: In a fire or if heated, a pressure increase will occur and the container may burst.	Special hazards arising from the substance or mixture: Substance or mixture corrosive to metals. In a fire or if heated, a pressure increase will occur and the container may burst.
5.3	Special protective equipment for firefighters: Self-contained breathing apparatus (EN 133). Standard protective clothing for firefighters.	Special protective equipment for firefighters: Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.
7.2		- corrosive conditions: Store in corrosive resistant container with a resistant inner liner.
8.1	National limit values: No information available.	National limit values
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)
8.1		Relevant DNELs of components of the mixture: change in the listing (table)
8.1		Relevant PNECs of components: change in the listing (table)
8.2	Appropriate engineering controls: General ventilation.	Appropriate engineering controls: General ventilation. Provide eyewash stations and safety showers at the workplace.
8.2	Eye/face protection: eye protection must be worn Use safety goggle with side protection (EN 166).	Eye/face protection: eye protection must be worn Use safety goggle with side protection
8.2	Skin protection: wear protective clothing Protective clothing (EN 340 & EN ISO 13688).	Skin protection: wear protective clothing Chemical protective clothing.

Section	Former entry (text/value)	Actual entry (text/value)
8.2	Hand protection: safety gloves must be worn Wear suitable gloves. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Chemical protection gloves are suitable, which are tested according to EN 374. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.	Hand protection: safety gloves must be worn Wear suitable gloves. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
8.2	Breakthrough times of the glove material: Use gloves with a minimum breakthrough times of the glove material: >10 minutes (permeation: level 1).	Breakthrough time of the glove material: Use gloves with a minimum breakthrough time of the glove material: >480 minutes (permeation: level 6).
8.2	- other protection measures: Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. Provide eyewash stations and safety showers at the workplace.	- other protection measures: Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.
8.2	Respiratory protection: In case of inadequate ventilation wear respiratory protection. Full face mask/half mask/quarter mask (EN 136/140). Type: ABEK-P2 (combined filters against gases, vapours and particles, colour code: Brown/Grey/Yellow/Green/White).	Respiratory protection: In case of inadequate ventilation wear respiratory protection. Type: ABEK-P2 (combined filters against gases, vapours and particles, colour code: Brown/Grey/Yellow/Green/White).
9.1		Density and/or relative density
9.1		Relative vapour density: information on this property is not available
9.2	Other information	Other information: There is no additional information.
9.2	Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not relevant	Information with regard to physical hazard classes: there is no additional information
10.1	Reactivity: This material is not reactive under normal ambient conditions.	Reactivity: Substance or mixture corrosive to metals.
11.1	Classification according to GHS (1272/2008/EC, CLP): This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.	Classification acc. to GHS
11.1	Acute toxicity of components of the mixture	
11.1		Acute toxicity estimate (ATE) of components: change in the listing (table)
11.1		Acute toxicity of components: change in the listing (table)
11.1	Respiratory or skin sensitisation: Contains Amines, C12-14-tert-alkyl, Sulfonic acids, petroleum, calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts, 5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione, Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts. May produce an allergic reaction.	Respiratory or skin sensitisation: Contains Amines, C12-14-tert-alkyl, Sulfonic acids, petroleum, calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts, 5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione. May produce an allergic reaction.
11.2	Information on other hazards: There is no additional information.	Information on other hazards

Section	Former entry (text/value)	Actual entry (text/value)
11.2		Endocrine disrupting properties: Contains an endocrine disruptor (ED) at a concentration of ≥ 0,1%.
11.2		Endocrine Disruptor lists: change in the listing (table)
12.1		Aquatic toxicity (acute) of components of the mixture: change in the listing (table)
12.1		Aquatic toxicity (chronic) of components of the mixture: change in the listing (table)
12.5	Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0,1%.
12.6	Endocrine disrupting properties: None of the ingredients are listed.	Endocrine disrupting properties: Contains an endocrine disruptor (ED) at a concentration of ≥ 0,1%.
12.6		Endocrine Disruptor lists: change in the listing (table)
14.3	Transport hazard class(es): not assigned	Transport hazard class(es): none
15.1	Restrictions according to REACH, Annex XVII	
15.1		Restrictions according to REACH, Annex XVII: change in the listing (table)
15.1	List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list: None of the ingredients are listed.	
15.1		Water Framework Directive (WFD)
15.1		List of pollutants (WFD): change in the listing (table)
15.1		National regulations (GB)
15.1		List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: None of the ingredients are listed.
15.1		Restrictions according to GB REACH, Annex 17
15.1		Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table)
16		Abbreviations and acronyms: change in the listing (table)
16	Key literature references and sources for data: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).	Key literature references and sources for data: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended). The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended). GB mandatory classification and labelling.Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Section	Former entry (text/value)	Actual entry (text/value)
16		List of relevant phrases (code and full text as stated in section 2 and 3): change in the listing (table)

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GB CLP	The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008

Abbr.	Descriptions of used abbreviations
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
LOEC	Lowest Observed Effect Concentration
Met. Corr.	Substance or mixture corrosive to metals
NLP	No-Longer Polymer
NOAEC	No Observed Adverse Effect Concentration
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
TWA	Time-weighted average
UEL	Upper explosion limit (UEL)
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended). The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended). GB mandatory classification and labelling.

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
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.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.