

according to Regulation (EC) No 1907/2006

#### SRS Rekord plus 40

Revision date: 01.07.2023

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# SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier SRS Rekord plus 40

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

#### Use of the substance/mixture

engine oil

# Uses advised against

none

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

Company name:	SRS Schmierstoff Vertrieb GmbH
Street:	Neuenkirchener Straße 8
Place:	D-48497 Salzbergen
Telephone:	05976 - 945-0
Responsible Department:	Abt. Produktsicherheit: info.reach@srs-oil.de
1.4. Emergency telephone	Gift-Informationszentrum Nord (Göttingen)
number:	Telefon 0551-19240

#### SECTION 2: Hazards identification

# 2.1. Classification of the substance or mixture

#### Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

#### 2.2. Label elements

#### Regulation (EC) No 1272/2008

#### Special labelling of certain mixtures

 EUH208
 Contains Alkyl- (C18-C28)

 Toluenesulfonic acid,
 Calcium salts, borated, Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts.

 May produce an allergic reaction.
 EUH210

 Safety data sheet available on request.

2.3. Other hazards

This mixture contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

For information or further instructions, see also section 11 or 12.

# **SECTION 3: Composition/information on ingredients**

# 3.2. Mixtures

# Hazardous components

CAS No	Chemical name	Chemical name				
	EC No	EC No Index No REACH No				
	Classification (Regulation (EC) No	Classification (Regulation (EC) No 1272/2008)				
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts			1 - < 3 %		
	272-238-5	01-2119657973-23				
	Eye Dam. 1, Aquatic Chronic 2; H318 H411					
	Alkyl- (C18-C28) Toluenesulfonic acid, Calcium salts, borated					



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	953-650-0			
	Repr. 2, Skin Sens. 1B; H361d H31	7		
722503-68-6	Benzenesulfonic acid, methyl-, mon	o-C20-24-branched alkyl derivs., cal	cium salts	0.5 - < 1 %
	682-816-2			
	Skin Sens. 1B; H317			

#### Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity			
	Specific Conc.	Limits, M-factors and ATE				
68784-31-6	272-238-5	-238-5 Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts				
	dermal: LD50 = >5000 mg/kg; oral: LD50 = >2000 mg/kg					
	953-650-0 Alkyl- (C18-C28) Toluenesulfonic acid, Calcium salts, borated					
	Repr. 2; H361d: >= 17,15 - 100					

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

#### After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, seek medical treatment.

#### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

#### After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

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

If swallowed or in the event of vomiting, risk of entering the lungs.

#### 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

Sand. Foam. Carbon dioxide (CO2). Extinguishing powder. In case of major fire and large quantities: Water spray jet. Water mist.

#### Unsuitable extinguishing media

High power water jet.

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

Burning produces heavy smoke.

In case of fire may be liberated: Carbon monoxide (CO). Carbon dioxide (CO2) Sulphur dioxide (SO2) Nitrogen



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oxides (NOx)

#### 5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

#### Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### **General advice**

#### Ventilate affected area.

Special danger of slipping by leaking/spilling product.

#### For non-emergency personnel

Wear personal protection equipment (refer to section 8).

#### For emergency responders

No special precautionary measures are necessary.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil.

#### 6.3. Methods and material for containment and cleaning up

#### For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

#### 6.4. Reference to other sections

No information available.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

Wear suitable protective clothing. (See section 8.) Avoid formation of oil dust.

#### Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking. Fire class B

#### Advice on general occupational hygiene

Clean skin thoroughly after working. Do not put any product-impregnated cleaning rags into your trouser pockets. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

#### Further information on handling

Do not breathe vapour/aerosol.

Avoid contact with eyes and skin.

General protection and hygiene measures: See section 8.

# 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product.

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#### Hints on joint storage

Do not store together with: Gas. Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances

#### Further information on storage conditions

Temperature control required. Protect from light. Keep container tightly closed. Do not allow contact with air.

#### 7.3. Specific end use(s)

See section 1.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### **DNEL/DMEL** values

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
68784-31-6	Phosphorodithioic acid, mixed O,O-bis	(sec-Bu and 1,3-dimethylbutyl) esters, zi	inc salts	
Worker DNEL	., long-term	inhalation	systemic	2.93 mg/m <sup>3</sup>
Worker DNEL	., acute	inhalation	systemic	496.4 mg/m <sup>3</sup>
Worker DNEL	., long-term	dermal	systemic	10.42 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	100 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	11.75 mg/m <sup>3</sup>
Consumer DN	IEL, acute	inhalation	systemic	198.6 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	2.1 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	50 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0.21 mg/kg bw/day
Consumer DN	NEL, acute	oral	systemic	29 mg/kg bw/day

#### **PNEC** values

CAS No	Name of agent		
Environmenta	Environmental compartment Value		
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts		
Freshwater		0,04 mg/l	
Marine water	0,0046 mg/l		
Freshwater sediment		0,07 mg/kg	
Marine sediment		0,007 mg/kg	
Secondary poisoning		8,33 mg/kg	
Micro-organisms in sewage treatment plants (STP) 3,8 mg/		3,8 mg/l	
Soil 0,055			

#### Additional advice on limit values

Air limit values: Possibility of exposure to Aerosol (Mineral oil ) Limit value (TLV-TWA ) = 5 mg/ m3 - Source: ACGIH Limit value (TLV-STEL ) = 10 mg/ m3 - Source: ACGIH

STEL: short-term exposure limits TLV: Threshold Limiting Value TWA: time weighted average



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#### ACGIH: American Conference of Governmental Industrial Hygienists

#### 8.2. Exposure controls



# Appropriate engineering controls

Provide adequate ventilation.

#### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Safety goggles with side protection. In case of increased risk add protective face shield. EN 166

#### Hand protection

Use safety gloves of following materials: NBR (nitrile) / neopren / viton (permeationslevel 5 - 6), Cat. II according to norm EN 374/EN 388.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

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.

Gloves must be periodically inspected and changed in case of wear, perforations or contaminations.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

#### Skin protection

Oil-resistant and hardly inflammable protective clothing.

#### **Respiratory protection**

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-aerosol or mist formation

-Exceeding exposure limit values

Suitable respiratory protection apparatus: Respiratory equipment in case of nebulosity or aerosol: Use a mask with a filter type A2, A2/P2 or ABEK.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

#### Thermal hazards

Wear protective clothing for operations with hot material: heat resistant coveralls (with trousers legs over boots and sleeves over cuffs of gloves), heat resistant heavy duty antiskid boots (e. g. leather).

#### **Environmental exposure controls**

No information available.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state:			
Colour:	clear		
Odour:	characteristic		
			Test method
Melting point/freezing point:		No information available.	
Boiling point or initial boiling point and		No information available.	
boiling range:			
Flammability:		No information available.	
Lower explosion limits:		No information available.	
Upper explosion limits:		No information available.	



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Flash point:221 °CDIN EN ISO 2719Auto-ignition temperature:No information available.Decomposition temperature:No information available.PH-Value:No information available.Viscosity / kinematic:129,1 mm?(at 40 °C)ImmiscibleWater solubility:ImmiscibleSolubility in other solventsImmiscible.No information available.Immiscible.Partition coefficient n-octanol/water:No information available.Vapour pressure:No information available.(at 20 °C)No information available.Vapour pressure:No information available.(at 50 °C)0.893 g/cm²Density (at 51 °C):0.893 g/cm²Particle characteristics:No information available.Relative vapour density:No information available.Particle characteristics:No information available.Particle characteristics:No information available.Particle characteristics:No information available.Soluti ing combusion:No information available.Solutizing propertiesNo information available.noneNo information available.Solutizing propertiesNo information available.No information available.No information available.Solutizing propertiesNo information available.noneNo information available.Solutizing propertiesNo information available.No information available.No information available.Solvent separation test:No information	Revision date: 01.07.2023			Page 6 of 11
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Viscosity / dynamic: No information available.				
		-27 °C	ASTM D 5985	
Flow time: No information available.	Viscosity / dynamic:	No information available.		
	Flow time:	No information available.		

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No information available.

# 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

#### 10.3. Possibility of hazardous reactions

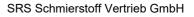
No hazardous reactions known. Refer to chapter 10.5.

# 10.4. Conditions to avoid

No information available.

#### 10.5. Incompatible materials

Oxidising agent, strong





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#### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

#### **SECTION 11: Toxicological information**

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

#### Toxicocinetics, metabolism and distribution

No information available.

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### **ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts						
	oral	LD50 >20 mg/kg	000	Rat.	ECHA Dossier	OECD Guideline 401	
		LD50 >50 mg/kg	000	Rabbit	ECHA Dossier	OECD Guideline 402	

#### Irritation and corrosivity

Based on available data, the classification criteria are not met. Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts: Irritant effect on the eye: Not an irritant. By analogy. Raw material classification

#### Sensitising effects

Contains Alkyl- (C18-C28)

Toluenesulfonic acid,

Calcium salts, borated, Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts. May produce an allergic reaction.

Alkyl- (C18-C28)

Toluenesulfonic acid,

Calcium salts, borated:

A raw material containing this substance has been tested/evaluated for sensitisation up to a maximum treat rate for the raw material of 12.9% with negative results. Based on this, the product itself is not considered to be sensitising to the skin (H317). (Dilution principle).

May cause sensitisation especially in sensitive humans.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts: Subacute oral toxicity: Method: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents); Species: Rat; Exposure duration: 28 d; Results: NOAEL = 125mg/kg; Literature information: ECHA Dossier

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met. Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts: In-vitro mutagenicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay); Result: negative. ; Literature information: ECHA Dossier

#### Aspiration hazard

Based on available data, the classification criteria are not met.



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#### 11.2. Information on other hazards

Endocrine disrupting properties

# No information available.

#### Other information

Frequent contact specially if dried out may cause skin and eye irritations.

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
68784-31-6	Phosphorodithioic acid, m	ixed O,O-bis	(sec-Bu and	l 1,3-dim	ethylbutyl) esters, zinc sal	ts	
	Acute fish toxicity	LC50 4,4 mg/l	LL50 =	96 h	Oncorhynchus mykiss	ECHA Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 410 mg/l	EL50 =		Desmodesmus subspicatus	ECHA Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 75 mg/l	EL50 =	48 h	Daphnia magna	ECHA Dossier	OECD Guideline 202
	Crustacea toxicity	NOEC	0,4 mg/l	21 d	Daphnia magna	ECHA Dossier	OECD Guideline 211

#### 12.2. Persistence and degradability

The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts			
	EU Method C.6 < 5% 27 ECHA Dossier			

#### 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

#### 12.4. Mobility in soil

No information available.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

#### 12.7. Other adverse effects

No information available.

#### Further information

Ozone depletion potential (ODP): No information available.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods



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#### **Disposal recommendations**

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

#### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

#### **SECTION 14: Transport information**

Land transport (ADR/RID)			
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.		
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.		
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.		
14.4. Packing group:	No dangerous good in sense of this transport regulation.		
Inland waterways transport (ADN)			
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.		
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.		
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.		
14.4. Packing group:	No dangerous good in sense of this transport regulation.		
Marine transport (IMDG)			
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.		
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.		
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.		
14.4. Packing group:	No dangerous good in sense of this transport regulation.		
Air transport (ICAO-TI/IATA-DGR)			
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.		
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.		
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.		
14.4. Packing group:	No dangerous good in sense of this transport regulation.		
14.5. Environmental hazards			
ENVIRONMENTALLY HAZARDOUS:	No		
14.6. Special precautions for user         Informations for safe handling see chapter 7.         Informations for personal protective equipment see chapter 8.         14.7. Maritime transport in bulk according to IMO instruments         not relevant			
SECTION 15: Regulatory information			
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture			

# EU regulatory information Restrictions on use (REACH, annex XVII): Entry 75 2010/75/EU (VOC): No information available. 2004/42/EC (VOC):



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Information according to 2012/18/EU Not subject to 2012/18/EU (SEVESO III) (SEVESO III):

#### Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878) This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [CLP]. REACH 1907/2006 Appendix XVII, No (mixture): not relevant Observe in addition any national regulations!

#### National regulatory information

2 - obviously hazardous to water

# Water hazard class (D): Additional information

Regulation (EC) No 649/2012 of the European Parliament and of the Council concerning the export and import of dangerous chemicals: not relevant

15.2 Chemical Safety Assessment not applicable.

#### **SECTION 16: Other information**

#### Changes

Rev.: 1,0 - 09.05.2015 Rev.: 1,1 - 26.05.2016 Rev.: 2,0 - 15.06.2017 Rev.: 3,0 - 29.06.2018 Rev.: 4,0 - 25.06.2019 Rev.: 5,0 - 25.06.2020; Changes in chapter: 16 Rev.: 6.0 - 04.06.2021; Changes in chapter: 3.2, 6.1, 6.3, 11.2, 12.6, 12.7, 15.1, 16 Rev.: 6.1 - 06.09.2021; Changes in chapter: 2.2, 3.2, 11.1,12.1, 16 Rev.: 6.2 - 29.07.2022; Changes in chapter: 2.3, 3.2, 8.2, 12.5, 12.6, 16 Rev.: 7.0 - 01.07.2023, Changes in chapter: 9.1, 12.7, 16

#### Abbreviations and acronyms

CAS: Chemical Abstracts Service DNEL: Derived No Effect Level IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) LOAEL: Lowest observed adverse effect level LOAEC: Lowest observed adverse effect concentration LC50: Lethal concentration. 50 percent LD50: Lethal dose, 50 percent NOAEL: No observed adverse effect level NOAEC: No observed adverse effect concentration NTP: National Toxicology Program N/A: not applicable PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail ) SVHC: substance of very high concern TRGS Technische Regeln fuerGefahrstoffe



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TSCA: Toxic Substances Control Act VOC: Volatile Organic Compounds

#### Relevant H and EUH statements (number and full text)

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H361d	Suspected of damaging the unborn child.
H411	Toxic to aquatic life with long lasting effects.
EUH208	Contains Alkyl- (C18-C28)
Toluenesulfonic	acid,
Calcium salts,	borated, Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts.
	May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Further Informatio	n
Classification a	ccording to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure: Health hazards: Calculation method. Environmental hazards: Calculation method.

Physical hazards: On basis of test data

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)