



Revision date: 7 Jan 2021 Version: 3 Print date: 8 Jan 2021

**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)**

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

**1.1. Product identifier**

Trade name/designation:

RAVENOL HST SAE 5W-40

Article No.:

1111147

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

Use of the substance/mixture:

Lubricant

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

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Ravensberger Schmierstoffvertrieb GmbH

Jöllenbecker Str. 2

33824 Werther

Germany

Telephone: +49 5203 9719 0

Telefax: +49 5203 9719 40

E-mail: kontakt@ravenol.de

Website: www.ravenol.de

E-mail (competent person): technik@ravenol.de

**1.4. Emergency telephone number**

Abt. Technik (Produktsicherheit), 24h: +49 700 24 112 112 (Company ID: RAV) (outside USA/Canada)  
011 49 700 24 112 112 (Company ID: RAV) (inside USA/Canada), +49 5203 9719 0 (Mo-Do 7.30 Uhr -  
16.30 Uhr, Fr 7.30 Uhr - 13.15 Uhr) (Only available during office hours.)

**SECTION 2: Hazards identification**

\* **2.1. Classification of the substance or mixture**

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

\* **2.2. Label elements**

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

Hazard statements: -

**Supplemental hazard information**

EUH210 Safety data sheet available on request.

Precautionary statements: -

**2.3. Other hazards**

Other adverse effects:

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.



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## SECTION 3: Composition / information on ingredients

### \* 3.2. Mixtures

#### Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
<b>CAS No.:</b> 1190625-94-5 <b>EC No.:</b> 813-078-3 <b>REACH No.:</b> 01-2119498288-19	<b>C14-16-18 Alkyl phenol</b> Aquatic Chronic 4, Skin Irrit. 2 <b>Warning</b> H315-H413	0 - < 2 weight-%
<b>CAS No.:</b> 93819-94-4 <b>EC No.:</b> 298-577-9 <b>REACH No.:</b> 01-2119543726-33	<b>zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)</b> Aquatic Chronic 2, Eye Dam. 1, Skin Irrit. 2 <b>Danger</b> H315-H318-H411	0 - < 2 weight-%

Full text of H- and EUH-phrases: see section 16.

## 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). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

#### Following inhalation:

Provide fresh air. Consult a doctor immediately.

#### In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Consult a doctor immediately.

#### After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### Following ingestion:

Rinse mouth thoroughly with water. Do NOT induce vomiting. Consult a doctor immediately.

#### Self-protection of the first aider:

Use personal protection equipment. No direct artificial respiration to be given by first aider.

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

No known symptoms to date.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Observe risk of aspiration if vomiting occurs.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

Carbon dioxide (CO<sub>2</sub>)

Extinguishing powder

alcohol resistant foam

Use water spray jet to protect personnel and to cool endangered containers.

#### Unsuitable extinguishing media:

Full water jet

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

During heating or in case of fire, toxic gases is possible.

The formation of combustible vapours is possible at temperatures above: Flash point

#### Hazardous combustion products:

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>),

During heating or in case of fire, toxic gases is possible.

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Protective clothing.



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#### 5.4. Additional information

Do not inhale explosion and combustion gases. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

**Personal precautions:**

Use personal protection equipment. Special danger of slipping by leaking/spilling product.

**Protective equipment:**

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

**Emergency procedures:**

Remove persons to safety. Remove all sources of ignition. Provide adequate ventilation.

##### 6.1.2. For emergency responders

**Personal protection equipment:**

Use personal protection equipment.

#### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

**For containment:**

Suitable material for taking up: Sand, Kieselguhr, Universal binder, Chemical binding agents, containing acids

Prevent spread over a wide area (e.g. by containment or oil barriers).

**For cleaning up:**

Remove from the water surface (e.g. skimming, sucking). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

**Other information:**

Treat the recovered material as prescribed in the section on waste disposal.

#### 6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8

#### 6.5. Additional information

Clear spills immediately. Use appropriate container to avoid environmental contamination.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Protective measures**

**Advices on safe handling:**

Personal protection equipment: see section 8. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Do not put any product-impregnated cleaning rags into your trouser pockets. Clear spills immediately. Use appropriate container to avoid environmental contamination.

**Fire prevent measures:**

No special fire protection measures are necessary.

**Environmental precautions:**

Shafts and sewers must be protected from entry of the product.

**Advices on general occupational hygiene**

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Technical measures and storage conditions:**

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



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**Requirements for storage rooms and vessels:**

Suitable container/equipment material: Floors should be impervious, resistant to liquids and easy to clean. Shafts and sewers must be protected from entry of the product.  
 Keep/Store only in original container.

**Hints on storage assembly:**

not required

**Storage class:** 10 - Combustible liquids that cannot be assigned to any of the above storage classes

**Further information on storage conditions:**

Store in a cool dry place. Keep away from heat.

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

**Recommendation:**

Observe technical data sheet.

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

\* **8.1. Control parameters**

**8.1.1. Occupational exposure limit values**

No data available

**8.1.2. Biological limit values**

No data available

**8.1.3. DNEL-/PNEC-values**

Substance name	DNEL value	① DNEL type ② Exposure route
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	1.17 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	0.3 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	8.31 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	2.11 mg/m <sup>3</sup>	① DNEL Consumer ② Long-term - inhalation, systemic effects
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	0.58 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	0.29 mg/kg	① DNEL Consumer ② Long-term - dermal, systemic effects
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	0.24 mg/kg	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	100 µg/l	① PNEC aquatic, freshwater
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	10 µg/l	① PNEC aquatic, marine water
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	100 mg/l	① PNEC sewage treatment plant
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	852.58 mg/ kg bw/day	① PNEC soil



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Substance name	PNEC Value	① PNEC type
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	3.3 mg/kg bw/day	① PNEC secondary poisoning
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	1 mg/l	① PNEC aquatic, intermittent release
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	4 µg/l	① PNEC aquatic, freshwater
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	4.6 µg/l	① PNEC aquatic, marine water
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	100 mg/l	① PNEC sewage treatment plant
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	0.012 mg/kg	① PNEC sediment, freshwater
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	0.001 mg/kg	① PNEC sediment, marine water
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	0.005 mg/kg	① PNEC soil

\* **8.2. Exposure controls**

**8.2.1. Appropriate engineering controls**

See section 7. No additional measures necessary.

**8.2.2. Personal protection equipment**



**Eye/face protection:**

During transfer: Eye glasses with side protection  
 Wear eye/face protection. DIN EN 166

**Skin protection:**

Hand protection

Suitable material: NBR (Nitrile rubber), PVC (polyvinyl chloride), CR (polychloroprene, chloroprene rubber)

Thickness of the glove material:  $\geq 0,4$  mm

Breakthrough time: 480 min

Breakthrough times and swelling properties of the material must be taken into consideration.

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.

Tested protective gloves must be worn: EN ISO 374

Suitable protective clothing: Protective clothing

**Respiratory protection:**

Usually no personal respirative protection necessary.

**8.2.3. Environmental exposure controls**

See section 7. No additional measures necessary.



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## SECTION 9: Physical and chemical properties

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

#### Appearance

**Physical state:** Liquid

**Colour:** tawny

**Odour:** characteristic

#### Safety relevant basis data

parameter		at °C	Method	Remark
pH	≈ 6.5	20 °C		
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	<i>not determined</i>			
Decomposition temperature	<i>not determined</i>			
Flash point	238 °C			
Evaporation rate	<i>not determined</i>			
Auto-ignition temperature	<i>not determined</i>			
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Density	848 kg/m <sup>3</sup>	15 °C		
Bulk density	<i>not applicable</i>			
Water solubility	<i>not determined</i>			
Partition coefficient: n-octanol/water	<i>not applicable</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	82 mm <sup>2</sup> /s	40 °C		

### 9.2. Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No known hazardous reactions. Risk of explosion if heated under confinement.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

### 10.4. Conditions to avoid

To avoid thermal decomposition do not overheat.

### 10.5. Incompatible materials

Materials to avoid: Acid, Oxidising agent, Reducing agent

### 10.6. Hazardous decomposition products

Hazardous combustion products: Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

## SECTION 11: Toxicological information

### \* 11.1. Information on toxicological effects

Substance name	Toxicological information
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	<b>LD<sub>50</sub> oral:</b> >2,000 mg/kg (rat) OECD 423 <b>LD<sub>50</sub> dermal:</b> >2,000 mg/kg (rat) OECD 402
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	<b>LD<sub>50</sub> oral:</b> 2,600 g/m <sup>3</sup> (Rat) <b>LD<sub>50</sub> dermal:</b> 3,160 g/m <sup>3</sup> (Rabbit)



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**Acute oral toxicity:**

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

**Acute dermal toxicity:**

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

**Acute inhalation toxicity:**

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

**Skin corrosion/irritation:**

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

**Serious eye damage/irritation:**

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

**Respiratory or skin sensitisation:**

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

**Germ cell mutagenicity:**

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

**Carcinogenicity:**

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

**Reproductive toxicity:**

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

**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.

**Aspiration hazard:**

For viscosity data, see section 9.

**Additional information:**

No data available

**SECTION 12: Ecological information**

\* **12.1. Toxicity**

Substance name	Toxicological information
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	<b>LC<sub>50</sub></b> : >100 mg/l 4 d (fish, Cyprinus carpio) OECD 203 <b>EC<sub>50</sub></b> : >100 mg/l 2 d (crustaceans, invertebrates) OECD 202 <b>ErC<sub>50</sub></b> : >100 mg/l 3 d (Algae/water plant, Pseudokirchn erielle subcapitata) OECD 201
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	<b>LC<sub>50</sub></b> : 4.5 mg/l 4 d (fish) <b>EC<sub>50</sub></b> : 5.4 mg/l 2 d (crustaceans) <b>EC<sub>50</sub></b> : 2.1 mg/l 3 d (Algae/water plant)

**Assessment/classification:**

The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

**Additional ecotoxicological information:**

Do not allow uncontrolled discharge of product into the environment.

**12.2. Persistence and degradability**

Substance name	Biodegradation	Remark
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	Yes, slowly	

**Additional information:**

The product has not been tested.

**12.3. Bioaccumulative potential**

Substance name	Log K <sub>OW</sub>	Bioconcentration factor (BCF)
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4	0.9	





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Substance name	Log K <sub>ow</sub>	Bioconcentration factor (BCF)
EC No.: 298-577-9		

**Partition coefficient: n-octanol/water:**  
 not applicable

**Accumulation / Evaluation:**  
 The product has not been tested.

**12.4. Mobility in soil**  
 The product has not been tested.

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

Substance name	Results of PBT and vPvB assessment
C14-16-18 Alkyl phenol CAS No.: 1190625-94-5 EC No.: 813-078-3	The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS No.: 93819-94-4 EC No.: 298-577-9	The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Other adverse effects**  
 No information available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**  
 Dispose of waste according to applicable legislation.

**Waste treatment options**

**Appropriate disposal / Product:**  
 Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

**Appropriate disposal / Package:**  
 Non-contaminated packages may be recycled.

**13.2. Additional information**  
 The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

**SECTION 14: Transport information**

No dangerous good in sense of these transport regulations.

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1. UN-No.</b>			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
<b>14.2. UN proper shipping name</b>			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
<b>14.3. Transport hazard class(es)</b>			
not relevant			
<b>14.4. Packing group</b>			
not relevant			
<b>14.5. Environmental hazards</b>			
not relevant			





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Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
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#### 14.6. Special precautions for user

not relevant

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No transport as bulk according to IBC Code.

### SECTION 15: Regulatory information

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

##### 15.1.1. EU legislation

###### Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:

- E2 Hazardous to the Aquatic Environment in Category Chronic 2  
Safety data sheet available on request.

##### 15.1.2. National regulations

###### [DE] National regulations

###### Störfallverordnung

###### for substances contained in the product:

Hazard categories:

- E2 Hazardous to the Aquatic Environment in Category Chronic 2

###### Technische Anleitung Luft (TA-Luft)

###### Remark:

To follow: 5.2.5

###### Water hazard class

###### WGK:

2 - deutlich wassergefährdend

###### Source:

Self-classification (mixture; calculation rule).  
Identification number 436

###### Technische Regeln für Gefahrstoffe

TRGS 510  
TRGS 500

###### Berufsgenossenschaftliche Vorschriften (DGUV-Vorschriften)

Berufsgenossenschaftliche Informationen (DGUV-Informationen) 868  
Berufsgenossenschaftliche Regeln (DGUV-Regeln) 189, 190, 192, 195

###### Other regulations, restrictions and prohibition regulations

Altöl-Verordnung (AltöIV)

###### [DK] National regulations

###### Other regulations, restrictions and prohibition regulations

Lister over stoffer og processer, der anses for at være kræftfremkaldende

###### [FR] National regulations

###### Other regulations, restrictions and prohibition regulations

Tableaux de maladies professionnelles  
Nomenclature des installations classées pour la protection de l'environnement

###### [NL] National regulations

###### Other regulations, restrictions and prohibition regulations

Lijst van kankerverwekkende, mutagene, en voor de voortplanting giftige stoffen SZW  
Algemeene beoordelingsmethodiek Water (ABM)  
Nederlandse emissierichtlijn (NeR)

#### 15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.



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## SECTION 16: Other information

### \* 16.1. Indication of changes

1.2.	Relevant identified uses of the substance or mixture and uses advised against
2.1.	Classification of the substance or mixture
2.2.	Label elements
3.2.	Mixtures
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
11.1.	Information on toxicological effects
12.1.	Toxicity
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.4.	Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
16.5.	Relevant R-, H- and EUH-phrases (Number and full text)

### 16.2. Abbreviations and acronyms

See overview table at [www.euphrac.eu](http://www.euphrac.eu)

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

### 16.3. Key literature references and sources for data

67/548/EEC - Dangerous Substances Directive 1999/45/EEC - Dangerous Preparations Directive EC 1907/2006 - REACH Regulation 1272/2008 EC - Regulation on classification, labeling and packaging of substances and mixtures, and amending Directives 67/548/EEC and 1999/45/EC and Regulation (EC) No 1907/2006 Regulation (EC) No 1907/2006 (REACH), Annex II European Chemicals Agency (ECHA), C & L classification and labeling inventory European Chemicals Agency (ECHA), ECHA CHEM Registered substances OECD The Global Portal to Information on Chemical Substances (ChemPortal) Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA): GESTIS substance database and International limit values for chemical substances Federal Environment Agency, Section IV 2.4: Documentation and Information Centre substances hazardous to water Rigoletto (catalog substances hazardous to water)

### \* 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

### \* 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H315	Causes skin irritation.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

### 16.6. Training advice

No data available

### 16.7. Additional information

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.

\* Data changed compared with the previous version