Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) **RAVENOL VSG SAE 75W-90** 

Page 1/12

RAVENOL

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 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 VSG SAE 75W-90** 

> Article No.: 1221101 UFI: N4VT-A9QU-35SA-FPII

## 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**

Produktsicherheit 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): sdb@ravenol.de

#### \* 1.4. Emergency telephone number

24 hr. emergency phone number, 24h: +49 700 24 112 112 (Contract ID: RAV) / +1 872 5888271 (Contract ID: RAV)

## **SECTION 2: Hazards identification**

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

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

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	Calculation method.
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	Calculation method.

#### \* 2.2. Label elements

## Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms:



## Exclamation mark

Signal word: Warning

## Hazard components for labelling:

C16-18-(even numbered, saturated and unsaturated)-alkylamines; Polysulfides, di-tert-Bu

reaction.

hazard statements	for health hazards
H317	May cause an allergic skin

en / PL / DK / FI / FR / CA / ...

Page 2/12

RAVENOL

#### Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

Hazard statements for environmental hazards		
H412	Harmful to aquatic life with long lasting effects.	
Precautionary	y statements Prevention	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
Precautionary	y statements Response	
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.	
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.		

## **Precautionary statements Disposal**

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

## \* 2.3. Other hazards

Other adverse effects:

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

## **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]	Concen- tration
CAS No.: 68937-96-2 EC No.: 273-103-3 REACH No.: 01-2119540515-43	Polysulfides, di-tert-Bu Aquatic Chronic 4 (H413), Skin Sens. 1 (H317) Warning	2 - < 5 weight-%
EC No.: 931-384-6 REACH No.: 01-2119493620-38	Reaction products of bis (4-methyl pentan-2-yl) phosphoricacid with phosphorus oxide, propylene oxide and amines,C12-14-alkyl (branched)Acute Tox. 4 (H302), Aquatic Chronic 2 (H411), Eye Dam. 1 (H318),Skin Sens. 1 (H317)Image: Colspan="2">Image: Colspan="2">Image: Chronic 2 (H411), Eye Dam. 1 (H318),Skin Sens. 1 (H317)Image: Colspan="2">Image: Colspan="2">Colspan="2"Colspan="2">Colspan="2"Colspan="2"Colspan="2">Colspan="2"Colspan="2"Colspan="2">Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2" <t< td=""><td>0 - &lt; 0.5 weight-%</td></t<>	0 - < 0.5 weight-%
CAS No.: 1213789-63-9 EC No.: 627-034-4 REACH No.: 01-2119473797-19	C16-18-(even numbered, saturated and unsaturated)- alkylamines Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Asp. Tox. 1 (H304), Eye Dam. 1 (H318), STOT RE 2 (H373), STOT SE 3 (H335), Skin Corr. 1B (H314) O O O O Danger M-factor (acute): 10 M-factor (chronic): 10	0 - < 0.3 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.

\*

Page 3/12

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

#### 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** May produce an allergic reaction.

## 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 (CO2)

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 When hot, product develops flammable vapours.

## Hazardous combustion products:

Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx), Gases/vapours, toxic 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.

## 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:**

Personal protection equipment: see section 8

## **Emergency procedures:**

Eliminate all ignition sources if safe to do so. Remove persons to safety. 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).

Page 4/12

RAVENOL

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

#### 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:

Wear personal protection equipment (refer to 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.

## 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 (TRGS 510, Germany):** 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

Page 5/12

RAVENOL

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

## 8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	
Substance name	DNEL Value	<ol> <li>DNEL type</li> <li>Exposure route</li> </ol>
Polysulfides, di-tert-Bu	14.5 mg/m <sup>3</sup>	-
CAS No.: 68937-96-2 EC No.: 273-103-3	14.5 mg/m²	<ol> <li>DNEL worker</li> <li>Long-term – inhalation, systemic effects</li> </ol>
Polysulfides, di-tert-Bu	1.66 mg/kg	① DNEL worker
CAS No.: 68937-96-2 EC No.: 273-103-3	bw/day	② Long-term - dermal, systemic effects
Reaction products of bis (4-methyl pentan-2-yl) phosphoric acid with phosphorus oxide, propylen	8.56 mg/m <sup>3</sup>	① DNEL worker
e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6		② Long-term – inhalation, systemic effects
Reaction products of bis (4-methyl pentan-2-yl)	12.5 mg/kg	① DNEL worker
phosphoric acid with phosphorus oxide, propylen e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6	bw/day	② Long-term - dermal, systemic effects
C16-18-(even numbered, saturated and unsatura	0.38 mg/m <sup>3</sup>	① DNEL worker
ted)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4		$\ensuremath{\widehat{\mathbb{Q}}}$ Long-term – inhalation, systemic effects
C16-18-(even numbered, saturated and unsatura	1 mg/m <sup>3</sup>	① DNEL worker
ted)-alkylamines CAS No.: 1213789-63-9 EC No.: 627.034.4		2 Long-term – inhalation, local effects
EC No.: 627-034-4 C16-18-(even numbered, saturated and unsatura	1 mg/cm <sup>2</sup>	① DNEL worker
ted)-alkylamines	1 mg/cm	<ul> <li>2 Acute - inhalation, local effects</li> </ul>
CAS No.: 1213789-63-9 EC No.: 627-034-4		Acute minutation, local chects
Substance name	PNEC Value	① PNEC type
Reaction products of bis (4-methyl pentan-2-yl) phosphoric acid with phosphorus oxide, propylen e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6	0.0012 mg/l	① PNEC aquatic, freshwater
Reaction products of bis (4-methyl pentan-2-yl) phosphoric acid with phosphorus oxide, propylen e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6	0.12 μg/l	① PNEC aquatic, marine water
Reaction products of bis (4-methyl pentan-2-yl) phosphoric acid with phosphorus oxide, propylen e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6	24.33 mg/l	① PNEC sewage treatment plant
Reaction products of bis (4-methyl pentan-2-yl) phosphoric acid with phosphorus oxide, propylen e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6	3.13 mg/kg bw/day	① PNEC sediment, freshwater
Reaction products of bis (4-methyl pentan-2-yl) phosphoric acid with phosphorus oxide, propylen	0.313 mg/kg bw/day	1 PNEC sediment, marine water
e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6		
e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6 C16-18-(even numbered, saturated and unsatura ted)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	0.26 μg/l	① PNEC aquatic, freshwater
e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6 C16-18-(even numbered, saturated and unsatura ted)-alkylamines CAS No.: 1213789-63-9		<ol> <li>PNEC aquatic, freshwater</li> <li>PNEC aquatic, marine water</li> </ol>
e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6 C16-18-(even numbered, saturated and unsatura ted)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4 C16-18-(even numbered, saturated and unsatura ted)-alkylamines CAS No.: 1213789-63-9	0.26 μg/l 0.026 μg/l 3.76 mg/kg	
e oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6 C16-18-(even numbered, saturated and unsatura ted)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4 C16-18-(even numbered, saturated and unsatura ted)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4 C16-18-(even numbered, saturated and unsatura ted)-alkylamines CAS No.: 1213789-63-9	0.26 μg/l 0.026 μg/l	① PNEC aquatic, marine water

Page 6/12

RAVENOL

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

Substance name	PNEC Value	① PNEC type
C16-18-(even numbered, saturated and unsatura ted)-alkylamines	10 mg/kg	① PNEC soil
CAS No.: 1213789-63-9 EC No.: 627-034-4		

## \* 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. EN 166

## Skin protection:

Hand protection

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

Thickness of the glove material: >= 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.

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

## 9.1. Information on basic physical and chemical properties

## Appearance

\*

**Physical state:** Liquid **Odour:** characteristic

## Colour: light yellow

Safety relevant basis data

parameter		at °C	Method	Remark	
рН	not applicable	1			
Melting point	not determined				
Freezing point	not determined				
Initial boiling point and boiling range	not determined				
Decomposition temperature	not applicable				
Flash point	224 °C				
Evaporation rate	not determined				
Auto-ignition temperature	not determined				
Upper/lower flammability or explosive limits	not determined				
Vapour pressure	not determined				
Vapour density	not determined				
Density	843 kg/m <sup>3</sup>	15 °C			
Relative density	not applicable				
Bulk density	not applicable				

#### Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) RAVENOL VSG SAE 75W-90

Page 7/12

RAVENOL

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

parameter		at °C	Method	Remark
Water solubility	The study does not need to be conducted because the substance is known to be insoluble in water.			
Partition coefficient: n-octanol/ water	not applicable			
Dynamic viscosity	not determined			
Kinematic viscosity	109 mm²/s	40 °C		

## \* 9.2. Other information

Not applicable.

## **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, Oxidizing agent, Reducing agent

## **10.6.** Hazardous decomposition products

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

## Further information

No information available.

# **SECTION 11: Toxicological information**

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

Substance name	Toxicological information
alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	LD <sub>50</sub> oral: >1,200 mg/kg (Rat) OECD 401 LD <sub>50</sub> dermal: >2,000 mg/kg (Rat) OECD 402 LC <sub>50</sub> Acute inhalation toxicity (dust/mist): >5 mg/l 4 h

## 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:

No irritant effect.

## Serious eye damage/irritation:

No irritant effect.

## Respiratory or skin sensitisation:

May cause an allergic skin reaction.

## Germ cell mutagenicity:

No indications of human germ cell mutagenicity exist.

Safety Data Sheet according	to Regulation (E	C) No. 19	907/2006 (R	EACH)
<b>RAVENOL VSG SAE 75W-90</b>				

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

## **Carcinogenicity:**

No indication of human carcinogenicity.

## **Reproductive toxicity:**

No indications of human reproductive toxicity exist.

#### **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:**

Observe risk of aspiration if vomiting occurs.

For viscosity data, see section 9.

## Additional information:

Frequently or prolonged contact with skin may cause dermal irritation.

## \* 11.2. Information on other hazards

## Endocrine disrupting properties:

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

# **SECTION 12: Ecological information**

## \* 12.1. Toxicity

Substance name	Toxicological information		
Polysulfides, di-tert-Bu CAS No.: 68937-96-2 EC No.: 273-103-3	EC <sub>50</sub> : 0.24 mg/l 2 d (crustaceans)		
Reaction products of bis (4-methyl pentan-2-yl) phosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6	LC <sub>50</sub> : ≈24 mg/l 4 d EC <sub>50</sub> : 91.4 mg/l 2 d (crustaceans)		
C16-18-(even numbered, saturated and unsaturated)- alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	NOEC: >0.63 mg/l 4 d (fish) LC <sub>50</sub> : >0.84 mg/l 4 d (fish) EC <sub>50</sub> : >0.32 mg/l 2 d (crustaceans) EC <sub>50</sub> : >0.39 mg/l 3 d (Algae/water plant)		

## Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

Additional ecotoxicological information:

Do not allow uncontrolled discharge of product into the environment.

## 12.2. Persistence and degradability

## **Biodegradation:**

Not readily biodegradable (according to OECD criteria)

## \* 12.3. Bioaccumulative potential

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	
Polysulfides, di-tert-Bu CAS No.: 68937-96-2 EC No.: 273-103-3	_	
Reaction products of bis (4-methyl pentan-2-yl) phosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) EC No.: 931-384-6	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.	
C16-18-(even numbered, saturated and unsaturated)- alkylamines CAS No.: 1213789-63-9	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.	



Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)	
RAVENOL VSG SAE 75W-90	

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

Substance name	Results of PBT and vPvB assessment
EC No.: 627-034-4	

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

## \* 12.6. Endocrine disrupting properties

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

## 12.7. Other adverse effects

No data available.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Dispose of waste according to applicable legislation.

## 13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code packaging:

#### **Remark:**

Dispose of waste according to applicable legislation.

## Waste treatment options

#### Appropriate disposal / Product:

Dispose of waste according to applicable legislation.

## Appropriate disposal / Package:

Non-contaminated packages may be recycled.

## Other disposal recommendations:

Consult the appropriate local waste disposal expert about waste disposal.

## 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)
14.1. UN number o	r ID number		
No dangerous good in sense of these transport regulations.			
14.2. UN proper sh	ipping name		
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.
14.3. Transport haz	ard class(es)		
not relevant			
14.4. Packing grou	p		
No dangerous good in sense of these transport regulations.			
14.5. Environmenta	al hazards		
not relevant			

## 14.6. Special precautions for user

not relevant

# 14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

Page 9/12

RAVENOL

Page 10/12

RAVENOĽ

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

## **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:

• E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Safety data sheet available on request.

## 15.1.2. National regulations

## [DE] National regulations

## **Restrictions of occupation**

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/ EEC) for expectant or nursing mothers.

## Störfallverordnung

## for substances contained in the product:

This product is not assigned to a hazard category.

## for substances possibly developing during an incident:

Hazard categories:

• E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

## **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 (AltölV)

## [DK] National regulations

## Other regulations, restrictions and prohibition regulations

Dänemark: Bekendtgørelse af lov om arbejdsmiljø: Beskæftigelsesministeriets lovbekendtgørelse nr. 1072 af 7. september 2010

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

## FR] National regulations

#### **Other regulations, restrictions and prohibition regulations** Frankreich: Tableaux de maladies professionelles

Nomenclature des installations classées pour la protection de l'environnement Articles L. 4523-1 à L. 4523-17, L. 4611-1 à L. 4614-16, R. 4523-1 à R. 4523-17 et R. 4612-1 à R. 4615-21 du Code du travail

Page 11/12

RAVENOL

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

## [NL] National regulations

## Other regulations, restrictions and prohibition regulations

Niederlande: Lijst vank kankerverwekkende, mutagene en voor de voortplanting giftige stoffen (SZW) Algemeene beoordelingsmethodiek Water (ABM) Nederlandse emissierichtlijn (NeR) NIET-Limitatieve lijst an voor de voortplanting giftige stoffen - Borstvoeding NIET-Limitatieve lijst an voor de voortplanting giftige stoffen - Vruchtbaarheid NIET-Limitatieve lijst an voor de voortplanting giftige stoffen - Ontwikkeling SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen Wet van 18 maart 1999, houdende bepalingen ter verbetering van de arbeidsomstandigheden (Arbeidsomstandighedenwet) Wet op de ondernemingsraden 1971 -[CH] National regulations

## Other regulations, restrictions and prohibition regulations

Mengenschwelle (Schweiz - StFV) Gefahrencode Brandverhütung, BVD (Schweiz)

## 15.2. Chemical Safety Assessment

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

## 15.3. Additional information

No data available.

## **SECTION 16: Other information**

#### 16.1 Indication of changes \*

IU.I.	indication of changes
1.1.	Product identifier
1.3.	Details of the supplier of the safety data sheet
1.4.	Emergency telephone number
2.1.	Classification of the substance or mixture
2.2.	Label elements
2.3.	Other hazards
3.2.	Mixtures
4.1.	Description of first aid measures
4.2.	Most important symptoms and effects, both acute and delayed
6.1.	Personal precautions, protective equipment and emergency procedures
6.3.	Methods and material for containment and cleaning up
7.1.	Precautions for safe handling
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
9.2.	Other information
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.2.	Information on other hazards
12.1.	Toxicity
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
12.6.	Endocrine disrupting properties
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

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

Page 12/12

RAVENOL

Revision date: 1 Oct 2021 Version: 4 Print date: 1 Oct 2021

## 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]:

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	Calculation method.
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	Calculation method.

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

Hazard	statements
--------	------------

Hazard statements	
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure. ()
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
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 madeup material.

\* Data changed compared with the previous version