



Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

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 Marinefett

Article No.:

1340128

UFI:

FPWQ-MY3G-P80P-DYSF

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

Use of the substance/mixture:

grease

* 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 procedure
Respiratory or skin sensitisation (<i>Skin Sens. 1</i>)	H317: May cause an allergic skin reaction.	Calculation method.

* 2.2. Label elements

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

Hazard pictograms:



GHS07

Exclamation mark

Signal word: Warning



Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

Hazard components for labelling:

Polysulfides, di-tert-dodecyl; Naphthenic acids, zinc salts, basic

Hazard statements for health hazards

H317	May cause an allergic skin reaction.
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Precautionary statements Prevention

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves.

Precautionary 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.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary statements Disposal

P501	Dispose of contents/container to an appropriate recycling or disposal facility.
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2.3. Other hazards**Other adverse effects:**

The substances in the mixture do 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]	Concentration
CAS No.: 68425-15-0 EC No.: 270-335-7 REACH No.: 01-2119540516-41	Polysulfides, di-tert-dodecyl Skin Sens. 1B (H317) ⚠ Warning	2.5 - 10 weight-%
CAS No.: 84418-50-8 EC No.: 282-762-6 REACH No.: 01-2119988500-34	Naphthenic acids, zinc salts, basic Aquatic Chronic 3 (H412), Skin Sens. 1 (H317) ⚠ Warning	> 0.1 - < 1 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.
In case of eye irritation consult an ophthalmologist.

Following ingestion:

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water.
Consult a doctor immediately.

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

Gastrointestinal complaints
No further relevant information available.

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

Treat symptomatically.



Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Extinguishing powder, Carbon dioxide (CO₂), Water mist, Water spray jet.
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

No information available.

Hazardous combustion products:

Carbon monoxide, Carbon dioxide (CO₂), Gases/vapours, toxic

* 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.
Use water spray jet to protect personnel and to cool endangered containers.
Do not inhale explosion and combustion gases.

5.4. Additional information

Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use personal protection equipment.

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. Remove persons to safety.

Protective equipment:

Use personal protection equipment. Wear protective gloves/protective clothing/eye protection/face protection.

Emergency procedures:

Remove persons to safety.

6.1.2. For emergency responders

Personal protection equipment:

Use appropriate respiratory protection.

* 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

* 6.3. Methods and material for containment and cleaning up

For containment:

Take up mechanically. Dispose of waste according to applicable legislation.

For cleaning up:

Treat the recovered material as prescribed in the section on waste disposal. Never return spills in original containers for re-use. Clean contaminated articles and floor according to the environmental legislation. Retain contaminated washing water and dispose it.

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.



Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

- Keep cool. Protect from sunlight.
- Avoid contact with skin, eyes and clothes.
- Keep container tightly closed in a cool, well-ventilated place.

Fire prevent measures:

- Take precautionary measures against static discharges.

Environmental precautions:

- See section 8.

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:

- No special measures are necessary.

Packaging materials:

- Keep only in the original container.

Requirements for storage rooms and vessels:

- No special measures are necessary.
- Keep only in the original container.

Hints on storage assembly:

- Do not store together with: Oxidizing agent, Food and feedingstuffs

Storage class (TRGS 510, Germany): 10 - 13 - Other combustible and non-combustible substances

Further information on storage conditions:

- Store in a cool dry place. Protect against: Frost

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

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
CH	Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	① 10 mg/m ³ ② 40 mg/m ³ ⑤ (einatembare Fraktion)
TRGS 900 (DE)	Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	① 5 mg/m ³ ② 20 mg/m ³ ⑤ (alveolengängige Fraktion)

8.1.2. Biological limit values

- No data available

Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	32.9 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	5.8 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	46.7 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	16.7 mg/m ³	① DNEL Consumer ② Long-term - dermal, systemic effects
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	1.7 mg/kg bw/ day	① DNEL Consumer ② Long-term - oral, systemic effects
Substance name	PNEC Value	① PNEC type
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	3.85 mg/kg	① PNEC sediment, freshwater
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	0.385 mg/kg	① PNEC sediment, marine water

*** 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:**

Wear eye/face protection. EN 166

Skin protection:

Hand protection

Suitable material: NBR (Nitrile 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:

not required

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:** solid**Colour:** blue**Odour:** characteristic



Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	<i>not determined</i>		
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	<i>not determined</i>		
Evaporation rate	<i>not determined</i>		
Auto-ignition temperature	<i>not determined</i>		
Upper/lower flammability or explosive limits	0.9 - 7 Vol-%		
Vapour pressure	0.1 hPa	20 °C	
Vapour density	<i>not determined</i>		
Density	<i>not determined</i>		
Relative density	<i>not determined</i>		
Bulk density	<i>not determined</i>		
Water solubility	practically insoluble		
Partition coefficient: n-octanol/water	<i>not determined</i>		
Dynamic viscosity	<i>not determined</i>		
Kinematic viscosity	<i>not determined</i>	40 °C	

* **9.2. Other information**

Nicht zutreffend.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No further relevant information available.

* **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.
No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

* **10.4. Conditions to avoid**

Avoid: Heat, Flame
Closed containers may burst when pressure and temperature rise.
To avoid thermal decomposition do not overheat. Do not store at temperatures above 60°C.

10.5. Incompatible materials

No further relevant information available.

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**

Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7
LD ₅₀ oral: >2,000 mg/kg (Rat)
LD ₅₀ dermal: >2,000 mg/kg (Rat) OECD-402
Naphthenic acids, zinc salts, basic CAS No.: 84418-50-8 EC No.: 282-762-6
LD ₅₀ oral: >2,000 mg/kg (Ratte)
LD ₅₀ dermal: >2,000 mg/kg (Ratte)
LC ₅₀ Acute inhalation toxicity (vapour): >42 mg/L 4 h (Ratte)

Acute oral toxicity:

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



Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

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:

May cause an allergic skin reaction.

Frequently or prolonged contact with skin may cause dermal irritation.

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:

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

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****Polysulfides, di-tert-dodecyl CAS No.:** 68425-15-0 **EC No.:** 270-335-7**LC₅₀:** >100 mg/L 4 d (fish, Danio rerio)**NOEC:** <0.08 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)**Naphthenic acids, zinc salts, basic CAS No.:** 84418-50-8 **EC No.:** 282-762-6**EC₅₀:** >100 mg/L (Daphnia magna (Großer Wasserfloh))**Assessment/classification:**

No further relevant information available.

* **12.2. Persistence and degradability****Polysulfides, di-tert-dodecyl CAS No.:** 68425-15-0 **EC No.:** 270-335-7**Biodegradation:** Yes, slowly**Remark:** OECD 301F 0%**Additional information:**

No further relevant information available.

12.3. Bioaccumulative potential**Bioconcentration factor (BCF):**

No further relevant information available.

* **12.4. Mobility in soil**

No further relevant information available.

water hazard class 1: slightly hazardous to water

Do not allow to enter into surface water or drains.



Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

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

Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7
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Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

Naphthenic acids, zinc salts, basic CAS No.: 84418-50-8 EC No.: 282-762-6
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Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

The substances in the mixture do 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 non-target organisms as no components meets the criteria.

* **12.7. Other adverse effects**

No further relevant information 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. 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

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
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.
14.2. UN proper shipping 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 hazard class(es)			
not relevant	not relevant	not relevant	not relevant
14.4. Packing group			
not relevant	not relevant	not relevant	not relevant
14.5. Environmental hazards			
not relevant	not relevant	not relevant	not relevant
14.6. Special precautions for user			
not relevant	not relevant	not relevant	not relevant

* **14.7. Maritime transport in bulk according to IMO instruments**

No transport as bulk according to IBC Code.



Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

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]: This product is not assigned to a hazard category.

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.

Technische Anleitung Luft (TA-Luft)

Remark:

To follow: 5.2.5

Water hazard class

WGK:

1 - schwach wassergefährdend

Source:

Self-classification (mixture; calculation rule).

Technische Regeln für Gefahrstoffe

TRGS 510

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

Berufsgenossenschaftliche Vorschriften (DGUV-Vorschriften)

Berufsgenossenschaftliche Informationen (DGUV-Informationen) 868

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

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

* 16.1. 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
3.2.	Mixtures
4.1.	Description of first aid measures
4.2.	Most important symptoms and effects, both acute and delayed
5.3.	Advice for firefighters
6.1.	Personal precautions, protective equipment and emergency procedures
6.2.	Environmental precautions
6.3.	Methods and material for containment and cleaning up
6.5.	Additional information
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
9.2.	Other information
10.2.	Chemical stability
10.4.	Conditions to avoid
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.2.	Information on other hazards



Revision date: 14 Feb 2022 Version: 3 Print date: 12 Apr 2022

12.1.	Toxicity
12.2.	Persistence and degradability
12.4.	Mobility in soil
12.5.	Results of PBT and vPvB assessment
12.6.	Endocrine disrupting properties
12.7.	Other adverse effects
14.7.	Maritime transport in bulk according to IMO instruments
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.5.	Relevant R-, H- and EUH-phrases (Number and full text)

16.2. Abbreviations and acronyms

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]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	Calculation method.

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

Hazard statements	
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

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