



## RAVENOL Mehrzweckfett mit MoS2



### ART.-NR. 1340103

1 kg | 1340103-001  
5 kg | 1340103-005  
10 kg | 1340103-010  
15 kg | 1340103-015  
25 kg | 1340103-025  
100 g | 1340103-100  
180 kg | 1340103-180  
200 g | 1340103-200  
400 g | 1340103-400

**SPEZIFIKATIONEN** DIN 51 502: KPF2K-30 IISO 6743 TEIL 9: ISO-L-XCCIB2

**RAVENOL Mehrzweckfett mit MoS2** ist ein lithium-verseiftes Schmierfett mit Oxidations- und Korrosionsschutzmittel. Zusätzliche Notlauf-Eigenschaften werden erreicht durch die Verwendung von Molybdändisulfid.

**RAVENOL Mehrzweckfett mit MoS2** hat einen sehr geringen inneren Reibewert und ist deswegen leicht förderbar.

**RAVENOL Mehrzweckfett mit MoS2** ist salzwasserbeständig und kann auch auf See eingesetzt werden.

## Anwendungshinweis

**RAVENOL Mehrzweckfett mit MoS2** wird oft für die Schmierung von schwer zugänglichen Stellen, die bei der Wartung oft vergessen werden und für die Schmierung von oszillierenden Maschinenteilen verwendet.

**RAVENOL Mehrzweckfett mit MoS2** wird auch empfohlen für Chassisschmierung.

## Eigenschaften

**RAVENOL Mehrzweckfett mit MoS2** bietet:

- Hervorragender Verschleißschutz
- Sehr gute mechanische Stabilität
- Sehr guter Korrosionsschutz
- Gute Haftung auf Metalloberflächen
- Gute Oxidationsstabilität



Eigenschaften	Einheit	Daten	Prüfung nach
Farbe		schwarz-grau	visuell
Verdicker		Lithium-Komplexseifen	-
Zusätze		Molybdändisulfid	-
NLGI-Klasse		2	DIN 51 818
DIN-Produkt-Klassifikation		KPF2K-30	DIN 51 502
ISO-Produkt-Klassifikation		ISO-L-XCCIB2	ISO 6743 T.9
Einsatz-Temperatur-Bereich	°C	-30/+120	DIN 51 825
max. kurzfristige Gebrauchstemperatur	°C	130	-
Walk-Penetration 60 strokes	mm/10 bei 25 °C	265-295	ISO 2137
Korrosion (SKF Emscor dest. Wasser)	Korr. Grad	1	DIN 51 802
Tropfpunkt	°C	>180	DIN ISO 2176
Kupferkorrosion (24h/120°C)		1	DIN 51 811
Wasserbeständigkeit (3h/90°C)	°C	1-90	DIN 51 807 T.1
VKA Schweißkraft	N	2800 - 3000	DIN 51 350 T.4
Kinematische Viskosität (Basisöl)	mm <sup>2</sup> /s bei 40°C	80	DIN 51562-1

Alle Angaben entsprechen nach bestem Wissen dem derzeitigen Stand der Erkenntnisse und unserer Entwicklung. Änderungen bleiben vorbehalten. Alle Bezugnahme auf DIN-Normen dienen nur der Warenbeschreibung und stellen keine Garantie dar. Bei vorliegenden Problemfällen technische Beratung anfordern.

Stand: 07. November 2016



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## 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 Mehrzweckfett mit MoS-2

Article No.:

1340103

#### 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

Jöllenbecker Str. 2

33824 Werther

D

Telephone: +49 5203 9719 0

Telefax: +49 5203 9719 48

E-mail: kontakt@ravenol.de

Website: www.ravenol.de

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

#### 1.4. Emergency telephone number

Abt. 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 (Only available during office hours.)

### SECTION 2: Hazards identification

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

No data available

#### 2.2. Label elements

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

##### Supplemental Hazard information (EU)

EUH210 Safety data sheet available on request.

#### 2.3. Other hazards

No data available

### 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.: 84961-70-6 EC No.: 284-660-7	Benzene, mono-C10-13-alkyl derivs., distn. residues Asp. Tox. 1 H304	10 - < 25 Wt %

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



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## SECTION 4: First aid measures

### \* 4.1. Description of first aid measures

#### General information:

No special measures are necessary. Change contaminated, saturated clothing.

#### Following inhalation:

Provide fresh air. Consult a doctor immediately.

#### In case of skin contact:

Wash with plenty of soap and water. In case of skin irritation, consult a physician.

#### 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.

#### After 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

### \* 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:

Extinguishing powder, Carbon dioxide (CO<sub>2</sub>), 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 (CO<sub>2</sub>), Sulphur oxides

### \* 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.

### \* 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:

Special danger of slipping by leaking/spilling product.

Remove all sources of ignition. Provide adequate ventilation.

#### 6.1.2. For emergency responders

##### Personal protection equipment:

Use appropriate respiratory protection.

### \* 6.2. Environmental precautions

Suppress gases/vapours/mists with water spray jet.

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.



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#### 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

No data available

### SECTION 7: Handling and storage

#### \* 7.1. Precautions for safe handling

##### Protective measures

##### Advices on safe handling:

Keep cool. Protect from sunlight.  
No special measures are necessary.  
Keep container tightly closed in a cool, well-ventilated place.

##### Fire prevent measures:

Take precautionary measures against static discharge.

##### 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

##### Requirements for storage rooms and vessels:

Keep container tightly closed in a cool place.  
To follow: TRGS 510  
Keep only in the original container at temperature not exceeding 40 °C.

##### Hints on storage assembly:

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

##### Storage class: 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

No data available

#### \* 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

No data available

##### 8.2.2. Personal protection equipment

##### Eye/face protection:

Wear eye/face protection. DIN EN 166

##### Skin protection:

Hand protection  
Suitable material: NBR (Nitrile rubber), CR (polychloroprene, chloroprene rubber)  
Thickness of the glove material:  $\geq 0,4$  mm  
Breakthrough time (maximum wearing 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: DIN EN 374

Suitable protective clothing: Protective clothing:



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**Respiratory protection:**

not required

**8.2.3. Environmental exposure controls**

See section 7. No additional measures necessary.

\* **8.3. Additional information**

No data available

**SECTION 9: Physical and chemical properties**

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

**Appearance**

**Physical state:** Paste

**Colour:** dark grey

**Odour:** characteristic

**Safety relevant basis data**

parameter		at °C	Method	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 (°C):	<i>not determined</i>			
Flash point	<i>not determined</i>			
Evaporation rate	<i>not determined</i>			
Ignition temperature in °C	350 °C			
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	0.1 hPa	20 °C		
Vapour density	<i>not determined</i>			
Relative density	<i>not determined</i>			
Bulk density	<i>not determined</i>			
Water solubility (g/L)	The study does not need to be conducted because the substance is known to be insoluble in water.			
Partition coefficient: n-octanol/water	<i>not determined</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	<i>not determined</i>	40 °C		
Drop point/drop range	> 180 °C			

**9.2. Other information**

NLGI Class(es) 2

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Reacts with strong oxidizing agents and strong reducing agents under severe heat.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

\* **10.4. Conditions to avoid**

Avoid: Heat, Flame

Do not store at temperatures above 60°C

**10.5. Incompatible materials**

No information available.



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## 10.6. Hazardous decomposition products

Gases/vapours, flammable - Violent reaction with: Oxidising agent, strong

## SECTION 11: Toxicological information

### \* 11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
84961-70-6	Benzene, mono-C10-13-alkyl derivs., distn. residues	LD <sub>50</sub> oral: >2,000 mg/kg (rat)

#### Acute oral toxicity:

The product has not been tested.

#### Acute dermal toxicity:

No information available for acute dermal and inhalative toxicity.

#### Acute inhalation toxicity:

No information available for acute dermal and inhalative toxicity.

#### Skin corrosion/irritation:

Frequently or prolonged contact with skin may cause dermal irritation.

#### Serious eye damage/irritation:

Causes eye irritation. slightly irritant

#### Respiratory or skin sensitisation:

No sensitizing effects known.

#### Germ cell mutagenicity:

No indications of human germ cell mutagenicity exist.

#### Carcinogenicity:

No indication of human carcinogenicity.

#### Reproductive toxicity:

No indications of human reproductive toxicity exist.

## SECTION 12: Ecological information

### \* 12.1. Toxicity

#### Aquatic toxicity:

The product has not been tested.

#### Assessment/classification:

No information available.

### 12.2. Persistence and degradability

#### Abiotic degradation:

The product has not been tested.

#### Additional information:

slightly hazardous to water (WGK 1). Do not allow to enter into surface water or drains.

### 12.3. Bioaccumulative potential

#### Bioconcentration factor (BCF):

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

CAS No.	Substance name	Results of PBT and vPvB assessment
84961-70-6	Benzene, mono-C10-13-alkyl derivs., distn. residues	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

The product has not been tested.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Dispose of waste according to applicable legislation.



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### 13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

#### Waste code product:

#### Remark:

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

#### 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.

### 14.1. UN-No.

not relevant

### 14.2. UN proper shipping name

not relevant

### 14.3. Transport hazard class(es)

not relevant

### 14.4. Packing group

not relevant

### 14.5. Environmental hazards

not relevant

### 14.6. Special precautions for user

not relevant

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not relevant

## 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):

Safety data sheet available for professional user on request.

#### 15.1.2. National regulations

##### [DE] National regulations

#### Water hazard class (WGK)

##### 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.





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**Berufsgenossenschaftliche Vorschriften (BGV)**

Berufsgenossenschaftliche Informationen (BGI) 868  
 Berufsgenossenschaftliche Regeln (BGR) 189, 190, 192, 195

**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**

3.2.	Mixtures
4.1.	Description of first aid measures
4.3.	Indication of any immediate medical attention and special treatment needed
5.1.	Extinguishing media
5.2.	Special hazards arising from the substance or mixture
5.3.	Advice for firefighters
5.4.	Additional information
6.1.	Personal precautions, protective equipment and emergency procedures
6.2.	Environmental precautions
7.1.	Precautions for safe handling
7.2.	Conditions for safe storage, including any incompatibilities
8.2.	Exposure controls
8.3.	Additional information
9.1.	Information on basic physical and chemical properties
10.4.	Conditions to avoid
11.1.	Information on toxicological effects
12.1.	Toxicity
12.5.	Results of PBT and vPvB assessment
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes

**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]**

No data available

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

Hazard statements	
H304	May be fatal if swallowed and enters airways.

**16.6. Training advice**

No data available



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### **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