



Revision date: 22-Nov-2016 Version: 2 Print date: 22-Nov-2016

## 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 Getriebeoel MZG SAE 80 GL 4

Article No.:

1223101

#### 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

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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

No data available

#### 2.3. Other hazards

No data available

### SECTION 3: Composition / information on ingredients

#### 3.2. Mixtures

Additional information:

The base oil / mineral oil used has a value of less than 3% DMSO, so it is not classified as a carcinogen.

### 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 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.



Revision date: 22-Nov-2016 Version: 2 Print date: 22-Nov-2016

**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.

**After 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:**

High power 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.

**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. Remove persons to safety.

**Protective equipment:**

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

**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



Revision date: 22-Nov-2016 Version: 2 Print date: 22-Nov-2016

**For cleaning up:**

Remove from the water surface (e.g. skimming, sucking). Absorb with liquid-binding material (e.g. 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:**

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:**

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:**

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:** 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**

No data available

**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



Revision date: 22-Nov-2016 Version: 2 Print date: 22-Nov-2016

**Skin protection:**

Hand protection  
 Suitable material: NBR (Nitrile rubber), PVC (Polyvinyl chloride)  
 Thickness of the glove material: >= 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.

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.

**8.3. Additional information**

Mineral oil mist limits:  
 OSHA PEL - value 5 mg / m<sup>3</sup>, ACGIH STEL - value of 10 mg / m<sup>3</sup>

**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	not determined			
Melting point	not determined			
Freezing point	not determined			
Initial boiling point and boiling range	not determined			
Decomposition temperature (°C):	not determined			
Flash point	230 °C			
Evaporation rate	not determined			
Ignition temperature in °C	not determined			
Upper/lower flammability or explosive limits	not determined			
Vapour pressure	not determined			
Vapour density	not determined			
Density	881 kg/m <sup>3</sup>	20 °C		
Bulk density	not determined			
Water solubility (g/L)	insoluble			
Partition coefficient: n-octanol/ water	not determined			
Dynamic viscosity	not determined			
Kinematic viscosity	84.4 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.



Revision date: 22-Nov-2016 Version: 2 Print date: 22-Nov-2016

### 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

#### Acute oral toxicity:

No information available.

#### Acute dermal toxicity:

No information available.

#### Acute inhalation toxicity:

No information available.

#### Skin corrosion/irritation:

Generally the product does not irritate the skin. Frequently or prolonged contact with skin may cause dermal irritation.

#### Eye damage/irritation:

No information available.

#### 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.

#### Aspiration hazard:

Observe risk of aspiration if vomiting occurs.

#### Additional information:

There are no data available on the preparation/mixture itself.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Assessment/classification:

The product has not been tested.

### 12.2. Persistence and degradability

#### Biodegradation:

Not readily biodegradable (according to OECD criteria)

### 12.3. Bioaccumulative potential

#### Bioconcentration factor (BCF):

There are no data available on the preparation/mixture itself.

### 12.4. Mobility in soil

There are no data available on the preparation/mixture itself.

### 12.5. Results of PBT and vPvB assessment

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

### 12.6. Other adverse effects

The insoluble part can be precipitated mechanically in suitable sewage treatment plants.

## 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.



Revision date: 22-Nov-2016 Version: 2 Print date: 22-Nov-2016

**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 applicable

**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:**

2 - deutlich wassergefährdend

**Description:**

hazardous to water (WGK 2)

**Source:**

Classification according to VwVwS, Annex 4.

**Technische Regeln für Gefahrstoffe**

TRGS 510

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

**Berufsgenossenschaftliche Vorschriften (BGV)**

Berufsgenossenschaftliche Informationen (BGI) 868

Berufsgenossenschaftliche Regeln (BGR) 189, 190, 192, 195

**Other regulations, restrictions and prohibition regulations**

Altöl-Verordnung (AltölV)

**15.2. Chemical Safety Assessment**

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

**15.3. Additional information**

No data available



Revision date: 22-Nov-2016 Version: 2 Print date: 22-Nov-2016

## SECTION 16: Other information

### 16.1. Indication of changes

sections 1-16

### 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]

No data available

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

No data available

### 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.