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 VMP SAE 5W-30

Article No.:
1111122

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
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

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Acute toxicity (dermal) *(Acute Tox. 4)*	H312: Harmful in contact with skin.	
Acute toxicity (inhalative) *(Acute Tox. 4)*	H332: Harmful if inhaled.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

2.2. Label elements

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

Hazard pictograms:

GHS07
Exclamation mark

Signal word: Warning

Hazard components for labelling:
Phenol, dodecyl-, branched; diphenylamine

hazard statements for health hazards	
H312	Harmful in contact with skin.
H332	Harmful if inhaled.

hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.

Supplemental Hazard information (EU): -

Precautionary statements Prevention	
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements Response	
P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor/Emergency telephone number/ if you feel unwell.

Precautionary statements Disposal	
P501	Dispose of contents/container to according to official regulations for disposal.

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.

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen-tration
CAS No.: 128-39-2 **EC No.:** 204-884-0	**2,6-di-tert-butylphenol** Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1  **Danger** H315-H400-H410	0 – < 0.3 Wt %
CAS No.: 121158-58-5 **EC No.:** 310-154-3	**Phenol, dodecyl-, branched** Repr. 2, Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1  **Danger** H315-H319-H361-H400-H410	0 – < 0.2 Wt %
CAS No.: 122-39-4 **EC No.:** 204-539-4	**diphenylamine** Acute Tox. 3, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1  **Danger** H301-H311-H331-H373-H410	0 – < 0.2 Wt %

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 place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:
Provide fresh air. In case of respiratory tract irritation, consult a physician. 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.

After ingestion:
Do NOT induce vomiting. Call a physician immediately. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
There are no data available on the mixture itself.

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:

Carbon dioxide (CO2)
Extinguishing powder
alcohol resistant foam

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.

Hazardous combustion products:

Nitrogen oxides (NOx)
Carbon monoxide
Carbon dioxide (CO2)

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Wear full chemical 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. This must not be discharged into drains.

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:

Personal protection equipment: see section 8

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 Kieselguhr Chemical binding agents, containing acids

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

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

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. Avoid oil mist. Do not put any product-impregnated cleaning rags into your trouser pockets. Wear personal protection equipment (refer to section 8).

Fire prevent measures:

No special fire protection measures are necessary.

Advices on general occupational hygiene

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. When using do not eat, drink or smoke. Avoid contact with eyes and skin.

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:

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

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
DFG (DE)	diphenylamine CAS No.: 122-39-4	① 5 mg/m³ ② 10 mg/m³ ⑤ (einatembare Fraktion)

8.1.2. biological limit values

No data available

8.1.3. DNEL-/PNEC-values

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

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.
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Filtering device with filter or ventilator filtering device of type: A

8.2.3. Environmental exposure controls
No data available

8.3. Additional information
Mineral oil mist limits:
OSHA PEL - value 5 mg / m³, ACGIH STEL - value of 10 mg / m³

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance
Physical state: liquid **Colour:** brown
Odour: characteristic

Safety relevant basis data

parameter		at °C	Method	Remark
pH	*not determined*			
Melting point/freezing point	*not determined*			
Freezing point	*not determined*			
Initial boiling point and boiling range	*not determined*			
Decomposition temperature (°C):	*not determined*			
Flash point	210 °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	849 kg/m³	20 °C		
Bulk density	*not determined*			
Water solubility (g/L)	insoluble			
Partition coefficient: n-octanol/ water	*not determined*			
Dynamic viscosity	*not determined*			
Kinematic viscosity	73.5 mm²/s	40 °C		

9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
No known hazardous reactions.

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
Oxidising agent, strong , Materials to avoid: Strong acid, Reducing agent, strong

10.6. Hazardous decomposition products
No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
122-39-4	diphenylamine	**LD_{50} oral:** 1,120 mg/kg

Acute oral toxicity:
There are no data available on the preparation/mixture itself.

Acute dermal toxicity:
There are no data available on the preparation/mixture itself.

Acute inhalation toxicity:
There are no data available on the preparation/mixture itself.

Skin corrosion/irritation:
There are no data available on the preparation/mixture itself.

Eye damage/irritation:
There are no data available on the preparation/mixture itself.

Respiratory or skin sensitisation:
There are no data available on the preparation/mixture itself.

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.

STOT-single exposure:
No information available.

STOT-repeated exposure:
No information available.

Aspiration hazard:
No information available.

Additional information:
This product contains mineral oils which are considered to be severely refined and not considered by IARC as carcinogenic. Based on the IP 346 test has been demonstrated that all of the oils contained in this product contain less than 3% extractables.

SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
122-39-4	diphenylamine	**LC_{50}:** 3.79 mg/l 4 d **EC_{50}:** 1.16 mg/l 2 d **EC_{50}:** 2.17 mg/l 3 d

Aquatic toxicity:
Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Abiotic degradation:
No information available.

Biodegradation:
No information available.

Additional information:
Poorly biodegradable.

12.3. Bioaccumulative potential

Bioconcentration factor (BCF):

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
128-39-2	2,6-di-tert-butylphenol	—
121158-58-5	Phenol, dodecyl-, branched	—
122-39-4	diphenylamine	—

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

12.6. 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 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 code packaging:

Remark:

Dispose of waste according to applicable legislation.

Waste treatment options

Appropriate disposal / Package:

Non-contaminated packages may be recycled.

13.2. Additional information

No data available

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

No

SECTION 15: Regulatory information

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

15.1.1. EU legislation

No data available

15.1.2. National regulations

[DE] National regulations

Restrictions of occupation

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

Water hazard class (WGK)

WGK:

2 - deutlich wassergefährdend

Description:

hazardous to water (WGK 2)

Berufsgenossenschaftliche Vorschriften (BGV)

Berufsgenossenschaftliche Regeln (BGR): 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

SECTION 16: Other information

16.1. Indication of changes

sections 1-16

16.2. Abbreviations and acronyms

See overview table at www.euphrac.eu

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 procedure
Acute toxicity (dermal) *(Acute Tox. 4)*	H312: Harmful in contact with skin.	
Acute toxicity (inhalative) *(Acute Tox. 4)*	H332: Harmful if inhaled.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

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

Hazard statements	
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H361	Suspected of damaging fertility or the unborn child.
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.

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.