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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 Hot Red Grease HRG 2

Article No.:

1340121

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]

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements

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

According to EC directives or the corresponding national regulations the product does not have to be labelled.

Hazard statements: none

Supplemental hazard information

EUH210

Safety data sheet available on request.

Precautionary statements: none

2.3. Other hazards

Other adverse effects:

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



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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.: 68411-46-1 EC No.: 270-128-1 REACH No.: 01-2119491299-23	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene Aquatic Chronic 3 (H412), Repr. 2 (H361) Warning	< 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:

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.

Following ingestion:

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 (CO₂), Water spray jet.**P:0662ae9e-16b2-4281-901e-2f3704dcd655**

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.

* 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.

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.



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Protective equipment:

Use personal protection equipment.

Emergency procedures:

Remove persons to safety. Provide adequate ventilation. Remove all sources of ignition.

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.

For cleaning up:

Take up mechanically.

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

SECTION 7: Handling and storage

* **7.1. Precautions for safe handling**

Protective measures

Advices on safe handling:

Keep cool. Protect from sunlight.

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:

No special measures are necessary.

Keep only in the original container.

Hints on storage assembly:

not required

Storage class (TRGS 510, Germany): 11 - Combustible solids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

Store in a cool dry place. Protect against: Frost, UV-radiation/sunlight

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



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8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	4.37 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	1.09 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	0.62 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	0.31 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	0.31 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	0.0338 mg/L	① PNEC aquatic, freshwater
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	0.0038 mg/L	① PNEC aquatic, marine water
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	10 mg/L	① PNEC sewage treatment plant
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	0.446 mg/kg	① PNEC sediment, freshwater
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	0.0446 mg/kg	① PNEC sediment, marine water
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	2.59 mg/kg	① PNEC soil

* 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.
EN 166

Skin protection:

Hand protection
Suitable material: NBR (Nitrile rubber), CR (polychloroprene, chloroprene rubber)
Thickness of the glove material: ≥ 0,4 mm



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Breakthrough time: 480 min

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.
 Respiratory protection necessary at: insufficient ventilation
P:dc2bf076-bffa-4072-8cff-7df4aa6ae9b8 ABEK
P:716cb8db-dded-4fbc-b1ef-2103bb2fa9b3

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: Paste

Colour: red

Odour: characteristic

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	No data available		
Melting point	No data available		
Freezing point	No data available		
Initial boiling point and boiling range	No data available		
Decomposition temperature	not applicable		
Evaporation rate	not applicable		
Upper/lower flammability or explosive limits	not applicable		
Vapour pressure	0.1 hPa	20 °C	
Vapour density	not applicable		
Density	No data available		
Relative density	not applicable		
Bulk density	not applicable		
Water solubility	practically insoluble		
Partition coefficient: n-octanol/water	not applicable		

particle characteristics:

No data available

9.2. Other information

organic solvents 0,0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

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



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10.5. Incompatible materials

No 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

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1
LD₅₀ oral: >5,000 mg/kg (rat)
LD₅₀ dermal: >2,000 mg/kg (Rat) OECD-402

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:

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

No data available

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

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1
LC₅₀: 100 mg/L 4 d (fish)
EC₅₀: 51 mg/L 2 d (crustaceans)
NOEC: 10 mg/L 2 d (crustaceans)
EC₅₀: 100 mg/L 3 d (Algae/water plant)
NOEC: ≥10 - ≤100 mg/L 3 d (Algae/water plant)

Aquatic toxicity:

No further relevant information available.

Assessment/classification:

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



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Additional ecotoxicological information:

Do not allow uncontrolled discharge of product into the environment.

12.2. Persistence and degradability

Abiotic degradation:

No further relevant information available.

Additional information:

slightly hazardous to water.
 Do not allow to enter into surface water or drains.

12.3. Bioaccumulative potential

Bioconcentration factor (BCF):

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

Partition coefficient: n-octanol/water:

not applicable

Accumulation / Evaluation:

No further relevant information available.

12.4. Mobility in soil

No further relevant information available.

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

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1
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 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

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.



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Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
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.

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):

This product is not assigned to a hazard category.
 Safety data sheet available for professional user on request.

15.1.2. National regulations

 **[DE] National regulations**

Störfallverordnung (12. BImSchV)

for substances contained in the product:

This product is not assigned to a hazard category.

Water hazard class

WGK:

1 - slightly hazardous to water

Source:

Self-classification (mixture; calculation rule).

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

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**

3.2.	Mixtures
4.1.	Description of first aid measures
5.1.	Extinguishing media
5.4.	Additional information
6.1.	Personal precautions, protective equipment and emergency procedures
6.2.	Environmental precautions
6.3.	Methods and material for containment and cleaning up
7.1.	Precautions for safe handling
7.2.	Conditions for safe storage, including any incompatibilities
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties



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11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
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
16.4.	Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
16.5.	List of relevant hazard statements and/or precautionary statements from sections 2 to 15

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

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)

Substance name	Type	source of supply
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene CAS No.: 68411-46-1 EC No.: 270-128-1	Classification of the substance or mixture	Source: European Chemicals Agency, http://echa.europa.eu/

* **16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]**

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

* **16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15**

Hazard statements	
H361	Suspected of damaging fertility or the unborn child.
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.