

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-HD pure

Revision date: 12.01.2021

Product code: 29060

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

RHEOSEPT-HD pure

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

Use of the substance/mixture

Alcoholic hand and skin disinfectant

Uses advised against

Disinfection of mucous membranes and raw wound

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|--|----------------------------|
| Company name: | NW-Chemie GmbH | |
| Street: | Langbaughstr. 15 | |
| Place: | D-53842 Troisdorf | |
| Telephone: | +49 2241-3923-0 | Telefax: +49 2241-3923-90 |
| e-mail: | info@rheosol.de | |
| Contact person: | Dr. Friedrichs (MSDS qualified person) | Telephone: +49 2241-3923-0 |
| e-mail: | sicherheit@rheosol.de | |
| Internet: | www.rheosol.de | |
| Responsible Department: | Produktsicherheit | |

1.4. Emergency telephone number:

Giftnotruf Berlin (Germany): +49 30 30686 700

Further Information

This safety data sheet replaces the former safety data sheet.

The affected sections are listed in section 16.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 3

Hazard Statements:

Flammable liquid and vapour.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H226 Flammable liquid and vapour.

Precautionary statements

| | |
|------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting equipment. |

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| | |
|-----------|--|
| P242 | Use non-sparking tools. |
| P243 | Take action to prevent static discharges. |
| P370+P378 | In case of fire: Use Alcohol resistant foam, CO2, powder, waterspray. to extinguish. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Alcohol-water-mixture

Hazardous components

| CAS No | Chemical name | Quantity | | |
|---------|--|--------------|------------------|-------------|
| | EC No | Index No | REACH No | |
| | GHS Classification | | | |
| 64-17-5 | ethanol, ethyl alcohol | | | 70 - < 75 % |
| | 200-578-6 | 603-002-00-5 | 01-2119457610-43 | |
| | Flam. Liq. 2; H225 | | | |
| 78-93-3 | butanone; ethyl methyl ketone | | | < 1 % |
| | 201-159-0 | 606-002-00-3 | | |
| | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066 | | | |

Full text of H and EUH statements: see section 16.

Further Information

Note: The danger characteristics refer to the properties of the neat substances.

Full text of R-phrases: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In all cases of doubt, or when symptoms persist, seek medical advice.

After inhalation

Provide fresh air. Seek medical attention if problems persist.

After contact with skin

In case of skin irritation persistence, seek medical treatment.

After contact with eyes

Rinse eyes immediately with plenty of water, keep eyelid open. Consult an ophthalmologist if necessary.

After ingestion

Rinse mouth immediately and drink plenty of water. Seek medical attention if problems persist.

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

No information available.

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**

Suitable extinguishing media: Water spray jet, Alcohol resistant foam. Extinguishing powder. Carbon dioxide (CO2).

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Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixtureIn case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂).**5.3. Advice for firefighters**

In case of fire and/or explosion do not breathe fumes.

In case of fire: Wear self-contained breathing apparatus.

Additional information

Product is flammable. Do not spray on hot surfaces.

Contaminated fire-fighting water must be collected separately.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Keep away from sources of ignition. - No smoking.

6.2. Environmental precautions

Do not empty undiluted or in larger quantities into drains or waters.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Suitable material for taking up: Universal binding agent.

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

Wash with plenty of water.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Use only in well-ventilated areas.

Do not breathe gas/fumes/vapour/spray.

Avoid contact with eyes.

Advice on protection against fire and explosion

Precautions against fire and explosion: Keep away from sources of ignition. - No smoking. Keep away from hot surfaces.

Further information on handling

Do not eat, drink or smoke at the workplace. Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Store in a well ventilated place away from heat and ignition sources.

After removing the product close the container tight.

Hints on joint storage

Do not store together with:

self-igniting material

igniting (oxidating) materials

Material, combustible.

material, flammable.

alkali metals

7.3. Specific end use(s)

No special handling instructions are necessary.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|---------|-----------------------------------|------|-------------------|-----------|---------------|--------|
| 78-93-3 | Butan-2-one (methyl ethyl ketone) | 200 | 600 | | TWA (8 h) | WEL |
| | | 300 | 899 | | STEL (15 min) | WEL |
| 64-17-5 | Ethanol | 1000 | 1920 | | TWA (8 h) | WEL |

Biological Monitoring Guidance Values (EH40)

| CAS No | Substance | Parameter | Value | Test material | Sampling time |
|---------|-------------|-------------|-----------|---------------|---------------|
| 78-93-3 | Butan-2-one | butan-2-one | 70 µmol/L | urine | Post shift |

DNEL/DMEL values

| CAS No | Substance | DNEL type | Exposure route | Effect | Value |
|---------|-------------------------------|--------------------------|----------------|----------|-----------------------|
| 78-93-3 | butanone; ethyl methyl ketone | | | | |
| | | Worker DNEL, long-term | dermal | systemic | 1161 mg/kg bw/day |
| | | Worker DNEL, long-term | inhalation | systemic | 600 mg/m ³ |
| | | Consumer DNEL, long-term | dermal | systemic | 412 mg/kg bw/day |
| | | Consumer DNEL, long-term | inhalation | systemic | 106 mg/m ³ |
| | | Consumer DNEL, long-term | oral | systemic | 31 mg/kg bw/day |

PNEC values

| CAS No | Substance | Environmental compartment | Value |
|---------|-------------------------------|--|------------|
| 78-93-3 | butanone; ethyl methyl ketone | | |
| | | Freshwater | 55,8 mg/l |
| | | Freshwater (intermittent releases) | 55,8 mg/l |
| | | Marine water | 55,8 mg/l |
| | | Freshwater sediment | 284,7 mg/l |
| | | Marine sediment | 287,7 mg/l |
| | | Micro-organisms in sewage treatment plants (STP) | 709 mg/l |
| | | Soil | 22,5 mg/kg |

8.2. Exposure controls

Protective and hygiene measures

Do not eat, drink or smoke at the workplace.

Eye/face protection

(If necessary) safety glasses. in case of handling bigger quantities.

Hand protection

(If necessary) protective gloves in case of handling bigger quantities.

Skin protection

not necessary

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Respiratory protection

Respiratory protection necessary at:
insufficient ventilation.
Handling larger quantities.
exceeding exposure limit values
Suitable respiratory protective equipment:
Full-/Half-/Quarter-Masks (DIN EN 136/140).
Typ A , AX

Environmental exposure controls

Do not empty indiluted or in larger quantaties into drains or waters.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|----------------------|------------|
| Physical state: | liquid |
| Colour: | colourless |
| Odour: | alcoholic |
| pH-Value (at 20 °C): | 6,8 |

Changes in the physical state

| | |
|--|-----------------------|
| Melting point: | < 0 °C |
| Initial boiling point and boiling range: | 78 °C |
| Sublimation point: | not applicable |
| Softening point: | not applicable |
| Pour point: | not applicable |
| Flash point: | 12 °C |
| Sustaining combustion: | Sustaining combustion |

Flammability

| | |
|-------------------------|----------------|
| Solid: | not applicable |
| Gas: | not applicable |
| Lower explosion limits: | 3,5 vol. % |
| Upper explosion limits: | 15 vol. % |
| Ignition temperature: | 400 °C |

Auto-ignition temperature

| | |
|--------|----------------|
| Solid: | not applicable |
| Gas: | not applicable |

Oxidizing properties

product not potentially explosive but may form flammable/explosive vapour-air mixtures

| | |
|--------------------------------|-------------------------|
| Vapour pressure: (at 20 °C) | 58 hPa |
| Vapour pressure: (at 50 °C) | 293 hPa |
| Density: | 0,865 g/cm ³ |
| Water solubility: | completely miscible |

9.2. Other information

| | |
|----------------|----------------|
| Solid content: | not applicable |
|----------------|----------------|

SECTION 10: Stability and reactivity

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10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

- Reaction with oxidizing agents.
- Reaction with alkali metals.
- Reaction with alkaline earth metals.

10.4. Conditions to avoid

In case of warming: Risk of selfignition.

10.5. Incompatible materials

- Alkali metals.
- Alkaline earth metals.
- Oxidizing agents.
- Strong acid.

10.6. Hazardous decomposition products

Prolonged exposure to direct and intensive sunlight may form explosive peroxides in the product

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

| CAS No | Chemical name | | | | |
|---------|-------------------------------|---------------|-----------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 64-17-5 | ethanol, ethyl alcohol | | | | |
| | oral | LD50 mg/kg | 6200 | Rat | IUCLID |
| | inhalation (4 h) vapour | LC50 | 95,6 mg/l | Rat | RTECS |
| 78-93-3 | butanone; ethyl methyl ketone | | | | |
| | oral | LD50 mg/kg | >2000 | Rat | |
| | dermal | LD50 mg/kg | >2000 | Rabbit | |
| | inhalation (4 h) vapour | LC50 | 34 mg/l | Rat | |

Irritation and corrosivity

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

In case of direct eye contact ethanol may cause smarting/sharp pain. Splashes of 40 - 50 % ethanol cause red palms and superficial lesions at the mucous membranes of eye, which are quickly reversible. Summerizing: ethanol can be classified as moderate eye irritating.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.

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Aspiration hazard

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

Specific effects in experiment on an animal

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

Practical experience**Observations relevant to classification**

Kann bei einmaliger Exposition Schläfrigkeit und Benommenheit verursachen.

SECTION 12: Ecological information**12.1. Toxicity**

There are no data available on the mixture itself.

| CAS No | Chemical name | | | | | |
|---------|-------------------------------|------------------------|-----------|---------------------------------|----------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 64-17-5 | ethanol, ethyl alcohol | | | | | |
| | Acute crustacea toxicity | EC50 9268 - 14221 mg/l | 48 h | Daphnia magna | IUCLID | |
| 78-93-3 | butanone; ethyl methyl ketone | | | | | |
| | Acute fish toxicity | LC50 2990 mg/l | 96 h | Pimephales promelas | OECD 203 | |
| | Acute algae toxicity | ErC50 1972 mg/l | 72 h | Pseudokirchneriella subcapitata | OECD 201 | |
| | Acute crustacea toxicity | EC50 >100 mg/l | 48 h | Daphnia magna | | |

12.2. Persistence and degradability

Easily biodegradable.

| CAS No | Chemical name | | | |
|---------|-------------------------------|-------|----|-----------|
| | Method | Value | d | Source |
| | Evaluation | | | |
| 78-93-3 | butanone; ethyl methyl ketone | | | |
| | Biological degradability | 98 % | 28 | OECD 301D |
| | Easily biodegradable. | | | |

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|---------|-------------------------------|---------|
| 64-17-5 | ethanol, ethyl alcohol | -0,31 |
| 78-93-3 | butanone; ethyl methyl ketone | 0,3 |

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

There are no data available on the mixture itself.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

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Disposal recommendations

Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If questions exist, contact the appropriate agencies.

Contaminated packaging

Completely emptied packings can be re-cycled.

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|--|---|
| 14.1. UN number: | UN 1170 |
| 14.2. UN proper shipping name: | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| 14.3. Transport hazard class(es): | 3 |
| 14.4. Packing group: | III |
| Hazard label: | 3 |



| | |
|--------------------------|---------|
| Classification code: | F1 |
| Special Provisions: | 144 601 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |
| Transport category: | 3 |
| Hazard No: | 30 |
| Tunnel restriction code: | D/E |

Inland waterways transport (ADN)

| | |
|--|---|
| 14.1. UN number: | UN 1170 |
| 14.2. UN proper shipping name: | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| 14.3. Transport hazard class(es): | 3 |
| 14.4. Packing group: | III |
| Hazard label: | 3 |



| | |
|----------------------|---------|
| Classification code: | F1 |
| Special Provisions: | 144 601 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |

Marine transport (IMDG)

| | |
|--|-------------------------|
| 14.1. UN number: | UN 1170 |
| 14.2. UN proper shipping name: | ETHANOL (ETHYL ALCOHOL) |
| 14.3. Transport hazard class(es): | 3 |
| 14.4. Packing group: | III |
| Hazard label: | 3 |



| | |
|---------------------|----------|
| Special Provisions: | 144, 223 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |

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EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1170
14.2. UN proper shipping name: ETHANOL (ETHYL ALCOHOL)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3



Special Provisions: A3 A58 A180
 Limited quantity Passenger: 10 L
 Passenger LQ: Y344
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 355
 IATA-max. quantity - Passenger: 60 L
 IATA-packing instructions - Cargo: 366
 IATA-max. quantity - Cargo: 220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No special handling instructions are necessary.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not classified for this transport way.

SECTION 15: Regulatory information

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

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 5.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

P: Marine Pollutant

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)

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EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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

| Classification | Classification procedure |
|--------------------|--------------------------|
| Flam. Liq. 3; H226 | On basis of test data |

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information

Notice the directions for use on the label.

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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)