

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-DR plus

Revision date: 26.03.2021

Product code: 20517

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

RHEOSEPT-DR plus

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

Disinfection cleaner for kitchen and food processing area

Uses advised against

Desinfection of medical devices

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:

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Causes severe skin burns and eye damage.

Causes serious eye damage.

Very toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Didecyldimethylammonium chloride

Signal word: Danger**Pictograms:**

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Hazard statements

H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see information on this label).

Additional advice on labelling

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

2.3. Other hazards

No information available.

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

aqueous mixture with quaternary ammonium compound

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
7173-51-5	Didecyldimethylammonium chloride			1 - < 5 %
	230-525-2		01-2119945987-15	
	Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 2; H301 H314 H318 H400 H411			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7173-51-5	230-525-2	Didecyldimethylammonium chloride	1 - < 5 %
	dermal: LD50 = 3342 mg/kg; oral: LD50 = 238 mg/kg M akut; H400: M=10		

Further Information

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

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

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

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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After inhalation

Provide fresh air. Medical treatment necessary. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

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

Observe risk of aspiration if vomiting occurs. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

Subsequent observance for pneumonia and lung oedema.

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**

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn. waterspray, foam, CO₂, powder

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air. In case of fire may be liberated: Carbon dioxide (CO₂). Carbon monoxide.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. 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****General measures**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Consider conventional precautions for chemical handling.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (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

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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special measures are necessary.

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

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep container tightly closed in a cool, well-ventilated place.

Protect against:

UV-radiation/sunlight.
frost.

Hints on joint storage

Do not store together with:

Reducing agents.

Zinc.

iron.

amines.

Aluminium.

Acid.

Further information on storage conditions

Keep only in the original container.

Recommended storage temperature: 5-30°C

7.3. Specific end use(s)

Disinfection cleaner for kitchen and food processing area

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
7173-51-5	Didecyldimethylammonium chloride			
Worker DNEL, long-term		inhalation	systemic	18,2 mg/m ³
Worker DNEL, long-term		dermal	systemic	8,6 mg/kg bw/day
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	500 mg/m ³
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	319 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	89 mg/m ³

PNEC values

CAS No	Substance	Value
7173-51-5	Didecyldimethylammonium chloride	
Environmental compartment		
Freshwater		0,002 mg/l
Freshwater (intermittent releases)		0,00029 mg/l
Marine water		0,0002 mg/l
Freshwater sediment		2,82 mg/kg
Marine sediment		0,282 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,595 mg/l
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	
Freshwater		140,9 mg/l
Freshwater (intermittent releases)		140,9 mg/l
Marine water		140,9 mg/l
Freshwater sediment		552 mg/kg
Marine sediment		552 mg/kg
Secondary poisoning		160 mg/kg
Micro-organisms in sewage treatment plants (STP)		2251 mg/l
Soil		28 mg/kg

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Avoid leakages in dosage systems

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

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Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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.

Skin protection

Working clothes.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	clear, colourless	
Odour:	amine-like	
pH-Value (at 20 °C):		11,5

Changes in the physical state

Melting point:		not applicable
Boiling point or initial boiling point and boiling range:		99,97 °C
Sublimation point:		not applicable
Softening point:		not applicable
Pour point:		not applicable
Flash point:		not known
Sustaining combustion:		Not sustaining combustion

Flammability

Solid/liquid:	not applicable
Gas:	not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Auto-ignition temperature:	not applicable

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature: not determined

Oxidizing properties

@0902.B091060

Vapour pressure: 23,37 hPa
(at 20 °C)

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Vapour pressure: (at 50 °C)	123,3 hPa
Density:	1,01 g/cm ³
Water solubility:	complete miscible
Solubility in other solvents not determined	
Partition coefficient n-octanol/water:	not determined
Relative vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not applicable
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SECTION 10: Stability and reactivity

10.1. Reactivity

Possibility of hazardous reactions. The product is stable under storage at normal ambient temperatures.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Peroxides. The product is stable, if used in compliance with instructions

10.4. Conditions to avoid

Protect from direct sunlight.

10.5. Incompatible materials

Keep away from: Acid, Peroxides. Materials to avoid: Acid.

10.6. Hazardous decomposition products

No dangerous decomposition products are known

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7173-51-5	Didecyltrimethylammonium chloride				
	oral	LD50 mg/kg 238	Rat	OECD 401	
	dermal	LD50 mg/kg 3342	Rabbit		

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

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.

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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.

Specific effects in experiment on an animal

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

Practical experience

Diluted solutions may have a weaker effect, depending on the concentration.

after ingestion: strong corrosive effect on oral cavity and throat, danger of oesophagus and stomach perforation

After skin contact: corrosive.

Irritant effect on the eye: Risk of serious damage to eyes.

Further information

To avoid risks to human health and the environment, comply with the instructions for use.

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7173-51-5	Didecyldimethylammonium chloride					
	Acute fish toxicity	LC50 mg/l	0,19	96 h	Pimephales promelas	US-EPA
	Acute algae toxicity	ErC50 mg/l	0,026	96 h	Pseudokirchneriella subcapitata	OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,062	48 h	Daphnia magna	EPA-FIFRA
	Fish toxicity	NOEC mg/l	0,032	34 d	Danio rerio	OECD 210
	Algae toxicity	NOEC	>0,01- 0,1 mg/l	3 d	Pseudokirchneriella subcapitata	OECD 201
	Crustacea toxicity	NOEC	>0,01- 0,1 mg/l	21 d	Daphnia	OECD 211

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
7173-51-5	Didecyldimethylammonium chloride			
	Die-Away Test	93,3	28	
	OECD Confirmatory-Test	91	24	OECD 303 A

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7173-51-5	Didecyldimethylammonium chloride	<3

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BCF

CAS No	Chemical name	BCF	Species	Source
7173-51-5	Didecyldimethylammonium chloride	2,1		

12.4. Mobility in soil

No information available.

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.

12.7. Other adverse effects

May cause long-term adverse effects in the environment.
Environmental properties

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Dispose of waste according to applicable legislation. Hand over to officially registered waste disposal company.

List of Wastes Code - residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Completely emptied packings can be re-cycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1903
14.2. UN proper shipping name:	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (didecyldimethylammonium chloride)
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8



Classification code:	C9
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

Inland waterways transport (ADN)

14.1. UN number:	UN 1903
14.2. UN proper shipping name:	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (didecyldimethylammonium chloride)

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14.3. Transport hazard class(es):

8

14.4. Packing group:

III

Hazard label:

8



Classification code:

C9

Special Provisions:

274

Limited quantity:

5 L

Excepted quantity:

E1

Marine transport (IMDG)

14.1. UN number:

UN 1903

14.2. UN proper shipping name:

DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
(didecyldimethylammonium chloride)

14.3. Transport hazard class(es):

8

14.4. Packing group:

III

Hazard label:

8



Special Provisions:

223, 274

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:

UN 1903

14.2. UN proper shipping name:

DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
(didecyldimethylammonium chloride)

14.3. Transport hazard class(es):

8

14.4. Packing group:

III

Hazard label:

8



Special Provisions:

A3 A803

Limited quantity Passenger:

1 L

Passenger LQ:

Y841

Excepted quantity:

E1

IATA-packing instructions - Passenger:

852

IATA-max. quantity - Passenger:

5 L

IATA-packing instructions - Cargo:

856

IATA-max. quantity - Cargo:

60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

Yes



Danger releasing substance:

didecyldimethylammonium chloride

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14.6. Special precautions for user

Warning: strongly corrosive.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3

2010/75/EU (VOC): 0,975 % (9,848 g/l)

2004/42/EC (VOC): 0,975 % (9,848 g/l)

Information according to 2012/18/EU (SEVESO III): E1 Hazardous to the Aquatic Environment

Additional information

Regulation (EC) No. 648/2004 (Detergents regulation).

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Didecyldimethylammonium chloride

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 2,3,4,5,6,7,8,10,11,12,14,16.

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)

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

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

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DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

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

Classification	Classification procedure
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301 Toxic if swallowed.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H400 Very toxic to aquatic life.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. Follow the instructions for use on the label.

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