

RHEOSEPT-ID drill

Revision date: 29.10.2024

Product code: 205460

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

1.1. Product identifier

RHEOSEPT-ID drill

UFI: WP0C-XKED-P001-6KDD

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

Use of the substance/mixture

Medical devices for cleaning or disinfection

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. Sarah Mues (SDS qualified person)	Telephone: +49 2241-3923-0
E-mail:	safety@rheosol.com	
Internet:	www.rheosol.de	
Responsible Department:	Produktsicherheit	

1.4. Emergency telephone number: Giftnotruf Berlin (Germany): +49 30 30686 700

Further Information

This data sheet replaces the previous one.
The sections concerned are listed in section 16.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

Additional advice on labelling

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

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aqueous solution with quaternary ammonium compound

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Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine			< 1 %
	219-145-8		01-2119980592-29	
	Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H301 H314 H318 H373 H400 H410			
7173-51-5	didecyldimethylammonium chloride			< 1 %
	230-525-2	612-131-00-6		
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 2; H302 H314 H318 H400 H411 EUH071			

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		
2372-82-9	219-145-8	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	< 1 %
	dermal: LD50 = > 600 mg/kg; oral: LD50 = 243 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=1		
7173-51-5	230-525-2	didecyldimethylammonium chloride	< 1 %
	dermal: LD50 = 3342 mg/kg; oral: LD50 = 329 mg/kg Aquatic Acute 1; H400: M=10		

Further Information

Note: These hazard characteristics refer to the properties of the pure ingredients.

Full text of H- and EUH-statements: 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).

After inhalation

Provide fresh air.

In case of inhaling spray mist, consult a physician.

After contact with skin

Take off contaminated clothing and wash it before reuse. Wash with plenty of water.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Observe risk of aspiration if vomiting occurs. Do NOT induce vomiting. Rinse mouth thoroughly with water.

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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.

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Water spray jet, Dry extinguishing powder, Carbon dioxide (CO₂)

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) Nitrogen oxides (NO_x)

5.3. Advice for firefighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. 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 advice

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Evacuate area.

For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment.

For emergency responders

Wear personal protection equipment (refer to section 8).

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Stop leak if safe to do so. Cover drains.

For cleaning up

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.

Other information

Clean contaminated articles and floor according to the environmental legislation.

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

When using do not eat, drink, smoke, sniff.

Provide adequate ventilation.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

UV-radiation/sunlight Keep container tightly closed. Keep container tightly closed in a cool, well-ventilated place.

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Hints on joint storage

No special measures are necessary.

Further information on storage conditions

Keep/Store only in original container.

storage temperature 5-30°C

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****DNEL/DMEL values**

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine			
Worker DNEL, long-term		inhalation	systemic	0,789 mg/m³
Worker DNEL, long-term		dermal	systemic	8,96 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,118 mg/m³
Consumer DNEL, long-term		dermal	systemic	3,2 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,04 mg/kg bw/day
7173-51-5	didecyldimethylammonium chloride			
Worker DNEL, long-term		inhalation	systemic	18,2 mg/m³
Worker DNEL, long-term		dermal	systemic	8,6 mg/kg bw/day

PNEC values

CAS No	Name of agent	
Environmental compartment	Value	
2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	
Freshwater	0,001 mg/l	
Freshwater (intermittent releases)	0 mg/l	
Marine water	0 mg/l	
Freshwater sediment	3,2 mg/kg	
Marine sediment	0,13 mg/kg	
Micro-organisms in sewage treatment plants (STP)	0,18 mg/l	
Soil	45,34 mg/kg	
7173-51-5	didecyldimethylammonium chloride	
Freshwater	0,0011 mg/l	
Freshwater (intermittent releases)	0,00021 mg/l	
Marine water	0,00011 mg/l	
Freshwater sediment	61,86 mg/kg	
Marine sediment	6,186 mg/kg	
Micro-organisms in sewage treatment plants (STP)	0,14 mg/l	
Soil	1,4 mg/kg	

8.2. Exposure controls**Appropriate engineering controls**

Provide adequate ventilation as well as local exhaust at critical locations.

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Individual protection measures, such as personal protective equipment

Eye/face protection

In case of handling larger quantities Safety glasses if necessary

Hand protection

if necessary, protective gloves

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

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Respiratory protection necessary at: exceeding exposure limit values

Thermal hazards

No information available.

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	clear, colourless	
Odour:	slightly rosy	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		99,97 °C
Flammability:		Non-flammable.
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		>100 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		10
Viscosity / kinematic:		not known
Water solubility:		completely miscible
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		23,37 hPa
(at 20 °C)		
Vapour pressure:		123,3 hPa
(at 50 °C)		
Density (at 20 °C):		0,99 g/cm³
Relative vapour density:		not determined
Particle characteristics:		not applicable

9.2. Other information

No information available.

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SECTION 10: Stability and reactivity

10.1. Reactivity

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

not known

10.4. Conditions to avoid

Frost Protect from sunlight.

Materials to avoid Acid, concentrated

10.5. Incompatible materials

No known hazardous reactions.

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**Acute toxicity**

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

ATEmix calculated

ATE (oral) 55227 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine				
	oral	LD50 243 mg/kg	Rat	Manufacturer	OECD Guideline 401
	dermal	LD50 > 600 mg/kg	Rat	Study report (1989)	EU Method B.3
7173-51-5	didecyltrimethylammonium chloride				
	oral	LD50 329 mg/kg	Rat	Manufacturer	
	dermal	LD50 3342 mg/kg	Rabbit		

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.

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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.

Information on likely routes of exposure

oral, Skin contact, Eye contact, Inhalation.

Specific effects in experiment on an animal

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

Additional information on tests

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

Practical experience

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

11.2. Information on other hazards**Endocrine disrupting properties**

The mixture does not contain substances $\geq 0.1\%$ of substances that have endocrine disrupting properties according to Regulation (EC) No. 1907/2006, Article 59(1) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.

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

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine					
	Acute fish toxicity	LC50 mg/l	0,68	96 h	Oncorhynchus mykiss	Manufacturer OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	0,054	96 h	Raphidocelis subcapitata	Manufacturer US-EPA
	Acute crustacea toxicity	EC50 mg/l	0,073	48 h	Daphnia magna	Manufacturer EPA OPPTS 850.1010
	Algae toxicity	NOEC mg/l	0,0069	3 d	Selenastrum capricornutum	OECD 201
	Crustacea toxicity	NOEC mg/l	0,032	21 d	Daphnia magna	Manufacturer OECD Guideline 211
	Acute bacteria toxicity	EC50)	18 mg/l (	3 h	activated sludge of a predominantly domestic sewage	REACH Registration Dossier OECD Guideline 209
7173-51-5	didecyltrimethylammonium chloride					
	Acute algae toxicity	ErC50 mg/l	ca. 0,06	72 h	Pseudokirchneriella subcapitata	Manufacturer OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	ca. 0,03	48 h	Daphnia magna	Manufacturer
	Algae toxicity	NOEC mg/l	0,013	3 d	Pseudokirchneriella subcapitata	Manufacturer OECD Guideline 201
	Crustacea toxicity	NOEC mg/l	0,021	21 d	Daphnia magna	Manufacturer OECD Guideline 211

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine			
	biological degradability	79 %	28	OECD 301 D
	OECD Confirmatory-Test	96	15	OECD 303 A
	Zahn-Wellens Test	91	28	OECD 301D
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
2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	0,34
7173-51-5	didecyldimethylammonium chloride	ca. 2,59

BCF

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

12.4. Mobility in soil

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

Mobility in soil: Didecyldimethylammoniumchlorid

Moderate adsorption in soil and sediment.: Bis(3-aminopropyl)dodecylamin

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. 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

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.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

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.

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SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.7. Maritime transport in bulk according to IMO instruments

Not classified for this transport carrier.

Other applicable information

No information available.

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

Directive 2010/75/EU on industrial emissions: 0,03 % (0,297 g/l)

Directive 2004/42/EC on VOC in paints and varnishes: 0,03 % (0,297 g/l)

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

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

according to Regulation (EC) No 1907/2006

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SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,5,6,7,8,9,10,11,12,13,16.

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Abbreviations and acronyms

Acute Tox: Acute toxicity
Skin Corr: Skin corrosion
Eye Dam: Eye damage
STOT RE: Specific target organ toxicity - repeated exposure
Aquatic Acute: Acute aquatic hazard
Aquatic Chronic: Chronic aquatic hazard
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
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>

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Key literature references and sources for data

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations). (v.1.2, 2013)

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

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

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