

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 1 of 12

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

RHEOSEPT-D+ ultra

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

Disinfectant for use in case of an officially ordered decontamination

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:

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 2

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Germ cell mutagenicity: Muta. 2

Carcinogenicity: Carc. 1B

Specific target organ toxicity - single exposure: STOT SE 1

Hazard Statements:

Toxic if swallowed or in contact with skin.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Fatal if inhaled.

Suspected of causing genetic defects.

May cause cancer.

Causes damage to organs.

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

formaldehyde

methanol

Signal word: Danger

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 2 of 12

Pictograms:



Hazard statements

H301+H311	Toxic if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H330	Fatal if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H370	Causes damage to organs.

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.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.

Additional advice on labelling

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

aqueous mixture of formaldeylde and methanol

Hazardous components

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
50-00-0	formaldehyde	35 - < 40 %
	200-001-8	01-2119488953-20
	Carc. 1B, Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1; H350 H341 H331 H311 H301 H314 H317	
67-56-1	methanol	10 - < 15 %
	200-659-6	603-001-00-X
	01-2119433307-44	
	Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370	

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

Further Information

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 3 of 12

Remove contaminated clothing immediately and dispose off safely.

Symptoms can occur delayed.

Call a physician immediately.

After inhalation

Provide fresh air.

In case of dyspnoea inhale oxygen.

Call a physician immediately.

After contact with skin

Wash immediately and abundantly with water.

Call a physician in any case!

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

Rinse mouth immediately and drink plenty of water.

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

Do NOT induce vomiting.

Call a physician immediately.

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

Irritations

Corrosive injuries

Allergic symptoms.

Cough

Dyspnoea

Drowsiness

Dizziness

Headache

Spasms

Unconsciousness

Danger of irreversible eye damage (Danger of blindness).

Pulmonary oedema

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

waterspray, foam, CO₂, powder

Adapt extinguishing measures to environment.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Mixture with combustible components. Can form explosive mixtures with air on intense heating.

In case of fire may be liberated:

formaldehyde fumes

Carbon monoxide (CO).

Carbon dioxide (CO₂).

5.3. Advice for firefighters

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

Wear full chemical protective clothing.

Additional information

Cool enclosed container close to fire source with water.

SECTION 6: Accidental release measures

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 4 of 12

6.1. Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment.
- Keep away unprotected persons.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.
- Avoid contact with skin and eyes.

6.2. Environmental precautions

- Use water spray jet to minimise or disperse vapours.
- Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

- Collect mechanically or with binding agent.
- Dispose contaminated material as described in section 13.

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

- Handle and open container with care.
- Keep container, equipment and workplace clean.

Advice on protection against fire and explosion

- Keep away from sources of ignition. - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

- Storage in original container.

Advice on storage compatibility

- Store separated from groceries.
- Do not store together with: Oxidising agent

Further information on storage conditions

- Keep container tightly closed. Keep in a cool, well-ventilated place.
- Protect from light influence.
- storage temperature: 15-25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
50-00-0	Formaldehyde	2	2.5		TWA (8 h)	WEL
		2	2.5		STEL (15 min)	WEL
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 5 of 12

DNEL/DMEL values

CAS No	Substance	DNEL type	Exposure route	Effect	Value
50-00-0	formaldehyde	Worker DNEL, long-term	dermal	systemic	240 mg/kg bw/day
		Worker DNEL, long-term	inhalation	systemic	0,5 mg/m ³
		Worker DNEL, acute	inhalation	systemic	1 mg/m ³
		Consumer DNEL, long-term	oral	systemic	4,1 mg/kg bw/day
		Consumer DNEL, long-term	dermal	systemic	102 mg/kg bw/day
		Consumer DNEL, long-term	inhalation	systemic	3,2 mg/m ³
		Consumer DNEL, long-term	dermal	local	0,012 mg/person/day
		Consumer DNEL, long-term	inhalation	local	0,1 mg/m ³
67-56-1	methanol	Worker DNEL, long-term	dermal	systemic	40 mg/kg bw/day
		Worker DNEL, long-term	inhalation	systemic	260 mg/m ³
		Worker DNEL, long-term	inhalation	local	260 mg/m ³
		Worker DNEL, acute	dermal	systemic	40 mg/kg bw/day
		Worker DNEL, acute	inhalation	systemic	260 mg/m ³
		Worker DNEL, acute	inhalation	local	260 mg/m ³
		Consumer DNEL, long-term	oral	systemic	8 mg/kg bw/day
		Consumer DNEL, long-term	dermal	systemic	8 mg/kg bw/day
		Consumer DNEL, long-term	inhalation	systemic	50 mg/m ³
		Consumer DNEL, long-term	inhalation	local	50 mg/m ³
		Consumer DNEL, acute	oral	systemic	8 mg/kg bw/day
		Consumer DNEL, acute	dermal	systemic	8 mg/kg bw/day
		Consumer DNEL, acute	inhalation	systemic	50 mg/m ³
		Consumer DNEL, acute	inhalation	local	50 mg/m ³

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 6 of 12

PNEC values

CAS No	Substance	Value
Environmental compartment		
50-00-0	formaldehyde	
Freshwater		0,47 mg/l
Freshwater (intermittent releases)		4,7 mg/l
Marine water		0,47 mg/l
Freshwater sediment		2,44 mg/kg
Marine sediment		2,44 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,19 mg/kg
Soil		0,21 mg/kg
67-56-1	methanol	
Freshwater		154 mg/l
Marine water		15 mg/l
Freshwater sediment		570 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		24 mg/kg

8.2. Exposure controls

Protective and hygiene measures

- Do not eat, drink or smoke at the workplace.
- Take off immediately all contaminated clothing.
- Do not breathe in fumes and aerosol.
- Avoid contact with eyes and skin.
- Thorough skin-cleansing after handling the product.

Eye/face protection

- Tightly sealed safety glasses.

Hand protection

- Wear suitable gloves.
- penetration time (maximum wearing period): 8 h
- Suitable material:
- NR (Natural rubber (Caoutchouc), Natural latex). 0,5 mm
- CR (polychloroprenes, Chloroprene rubber). 0,5 mm
- NBR (Nitrile rubber). 0,35 mm
- FKM (fluororubber). 0,4 mm
- PVC (Polyvinyl chloride). 0,5 mm
- Before using check leak tightness / impermeability.

Skin protection

- impermeable protective clothes

Respiratory protection

- Necessary in case of fumes/aerosols.
- Combination filter: B-(P3)
- Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 7 of 12

Odour:	pungent
pH-Value (at 20 °C):	3-4
Changes in the physical state	
Melting point:	< -15 °C
Initial boiling point and boiling range:	ca. 97 °C
Sublimation point:	No data available.
Softening point:	No data available.
Pour point:	No data available.
Flash point:	ca. 66 °C
Sustaining combustion:	Not sustaining combustion
Lower explosion limits:	7 vol. %
Upper explosion limits:	73 vol. %
Ignition temperature:	380 °C
Auto-ignition temperature	
Solid:	No data available.
Gas:	No data available.
Decomposition temperature:	No data available.
Vapour pressure:	No data available.
Vapour pressure:	No data available.
Density (at 20 °C):	1,1 g/cm ³
Water solubility:	completely miscible
Viscosity / dynamic: (at 20 °C)	2,5 mPa·s

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Danger of polymerisation

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Violent reaction with:
 Oxidizing agents, strong.
 base
 Phenol
 Formic acid
 Nitrogen dioxide
 Hydrogen peroxide
 Nitric acid

10.4. Conditions to avoid

Heating

10.5. Incompatible materials

Steel
 Copper

10.6. Hazardous decomposition products

In case of fire: SECTION 5: Firefighting measures

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 8 of 12

SECTION 11: Toxicological information

11.1. Information on toxicological effects

ATEmix calculated

ATE (oral) 222,2 mg/kg; ATE (dermal) 613,6 mg/kg; ATE (inhalative vapour) 1,57 mg/l; ATE (inhalative aerosol) 1,111 mg/l

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
50-00-0	formaldehyde				
	oral	LD50 100 mg/kg	Rat	TOXNET	
	dermal	LD50 270 mg/kg	Rabbit	IUCLID	
	inhalative (4 h) vapour	LC50 0,578 mg/l	Rat	IUCLID	
	inhalative aerosol	ATE 0,5 mg/l			
67-56-1	methanol				
	oral	LD50 5628 mg/kg	Rat	IUCLID	
	dermal	LD50 15800 mg/kg	Rabbit	TOXNET	
	inhalative (4 h) vapour	LC50 85,3 mg/l	Rat	IUCLID	
	inhalative aerosol	ATE 0,5 mg/l			

Practical experience

Observations relevant to classification

systemic impact:
 Headache
 Dizziness Vomiting
 Drowsiness
 Blood pressure drop
 Agitation
 Spasms
 Anaesthetic state
 Liver and kidney damage
 coma
 Death
 Symptoms can occur delayed.

SECTION 12: Ecological information

12.1. Toxicity

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 9 of 12

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
50-00-0	formaldehyde					
	Acute fish toxicity	LC50	41 mg/l	96 h	Brachydanio rerio	IUCLID
	Acute crustacea toxicity	EC50	42 mg/l	48 h	Daphnia magna	IUCLID
67-56-1	methanol					
	Acute fish toxicity	LC50	15400 mg/l	96 h	Lepomis macrochirus	ECOTOX DATABASE
	Acute crustacea toxicity	EC50	>10000 mg/l	48 h	Daphnia magna	IUCLID
	Algea toxicity	NOEC	8000 mg/l	8 d		

12.2. Persistence and degradability

Easily biodegradable (concerning to the criteria of the OECD)

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
50-00-0	formaldehyde			
	Biological degradability	97 %	5	
	Readily biodegradable.			

12.3. Bioaccumulative potential

Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
50-00-0	formaldehyde	0,78

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

Forms toxic and corrosive mixtures with water even if diluted. Risk the quality of drinking water.

Pay attention to water protection (gathering, embank), do not empty into drains or the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

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

Waste disposal number of waste from residues/unused products

061301 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from inorganic chemical processes not otherwise specified; inorganic plant protection products, wood-preserving agents and other biocides.; hazardous waste

Waste disposal number of used product

061301 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from inorganic chemical processes not otherwise specified; inorganic plant protection products, wood-preserving agents and other biocides.; hazardous waste

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 10 of 12

Waste disposal number of contaminated packaging

061301 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from inorganic chemical processes not otherwise specified; inorganic plant protection products, wood-preserving agents and other biocides.; hazardous waste

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number: UN 2209
14.2. UN proper shipping name: FORMALDEHYDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C9
Special Provisions: 533
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 2209
14.2. UN proper shipping name: FORMALDEHYDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C9
Special Provisions: 533
Limited quantity: 5 L
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 2209
14.2. UN proper shipping name: FORMALDEHYDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Special Provisions: -
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-B

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 11 of 12

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 2209
14.2. UN proper shipping name:	FORMALDEHYDE SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8



Special Provisions:	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



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

non-applicable

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water contaminating class (D):	2 - clearly water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

RHEOSEPT-D+ ultra

Revision date: 06.04.2018

Product code: 20505

Page 12 of 12

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

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H301+H311	Toxic if swallowed or in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H370	Causes damage to organs.

Further Information

Notice the directions for use on the label. @N16.P0000001

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.)