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

1.1. Product identifier

RHEOSOL-Deso

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

Use of the substance/mixture

Disinfecting detergent

1.3. Details of the supplier of the safety data sheet

Company name:	NW-Chemie GmbH	
Street:	Langbaurghstr. 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
Hazard Statements:
Causes severe skin burns and eye damage.
Causes serious eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Sodium percarbonate
2-DODECYLBENZENESULFONIC ACID
isotridecanol, ethoxylated
Disodium metascilicate pentahydrate

Signal word: Danger

Pictograms:

Hazard statements

H314 Causes severe skin burns and eye damage.

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.
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

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
497-19-8	sodium carbonate			40 - < 45 %
	207-838-8		01-2119485498-19	
	Eye Irrit. 2; H319			
15630-89-4	Sodium percarbonate			15 - < 20 %
	239-707-6		01-2119457268-30	
	Ox. Liq. 2, Acute Tox. 4, Eye Dam. 1; H272 H302 H318			
85536-14-7	2-DODECYLBENZENESULFONIC ACID			1 - < 5 %
	287-494-3		01-2119490234-40	
	Acute Tox. 4, Skin Corr. 1, Aquatic Chronic 3; H302 H314 H412			
69011-36-5	isotridecanol, ethoxylated			1 - < 5 %
	Acute Tox. 4, Eye Dam. 1; H302 H318			
10213-79-3	Disodium metasilicate pentahydrate			1 - < 5 %
	229-912-9		01-2119449811-37	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1B, STOT SE 3; H290 H312 H314 H335			

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

Labelling for contents according to Regulation (EC) No 648/2004

15 % - < 30 % phosphates, < 5 % anionic surfactants, < 5 % non-ionic surfactants.

Further Information

Note: The danger characteristics refer to the properties of the neat substances.
Full text of H- and EUH-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).

After inhalation

Medical treatment necessary. Provide fresh air.

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

Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk. Do NOT induce vomiting. Let water be drunken in little sips (dilution effect).

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

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.
Foam Water Carbon dioxide (CO2)

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. The product itself is not combustible, it is however slightly oxidising (active oxygen content approx. 2%).

5.3. Advice for firefighters

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

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. In case of fire, formation of hazardous fumes is possible. In case of contact with light metalls formation of hydrogen gas is possible.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation.

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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid dust formation. Do not breathe dust. Avoid contact with skin and eyes.
Do not breathe gas/fumes/vapour/spray.
When using do not eat, drink or smoke.

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 exhaustion at critical locations. Store cool, dry and frost-free. Storage in original container. After removing the product close the container tight.

Hints on joint storage

Do not store together with acid or light metals.

7.3. Specific end use(s)

Disinfecting detergent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
9014-01-1	Subtilisins (Bacillus subtilis Carlsberg)	-	0.00004		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
15630-89-4	Sodium percarbonate		
Worker DNEL, acute	dermal	local	12,8 mg/cm²
Worker DNEL, long-term	dermal	local	12,8 mg/cm²
Worker DNEL, long-term	inhalation	local	5 mg/m³
Consumer DNEL, acute	dermal	local	6,4 mg/cm²
Consumer DNEL, long-term	dermal	local	6,4 mg/cm²
,			
85536-14-7	2-DODECYLBENZENESULFONIC ACID		
Consumer DNEL, long-term	dermal	systemic	170 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
15630-89-4	Sodium percarbonate	
Freshwater		0,035 mg/l
Freshwater (intermittent releases)		0,035 mg/l
Marine water		0,035 mg/l
Micro-organisms in sewage treatment plants (STP)		16,24 mg/l
85536-14-7	2-DODECYLBENZENESULFONIC ACID	
Freshwater		0,268 mg/l

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust. 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. Protect skin by using skin protective cream. Before starting work, apply water-resistant skincare preparations.

Skincare preparations can not substitute protective gloves.

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. protective 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

Working clothes.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid (granulate)
Colour:	white
Odour:	perfumed
pH-Value (at 20 °C):	10-11 (0,4 % in H2O)

Changes in the physical state

Melting point:	not known
Initial boiling point and boiling range:	non-applicable
Sublimation point:	non-applicable
Flash point:	non-applicable

Flammability

Solid:	not determined
Gas:	not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined

Auto-ignition temperature

Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidizing.

Vapour pressure:	not determined
Density:	not determined
Bulk density:	0,88 kg/m³
Water solubility:	complete miscible

Solubility in other solvents

not determined

Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not determined

SECTION 10: Stability and reactivity

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

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

10.4. Conditions to avoid

not known

10.5. Incompatible materials

Do not mix with acids.

10.6. Hazardous decomposition products

The product is stable, if used in compliance with instructions No dangerous decomposition products are known

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
497-19-8	sodium carbonate				
	oral	LD50 2800 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rabbit		
15630-89-4	Sodium percarbonate				
	oral	LD50 1034 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rabbit		
85536-14-7	2-DODECYLBENZENESULFONIC ACID				
	oral	LD50 1470 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
69011-36-5	isotridecanol, ethoxylated				
	oral	LD50 500 mg/kg	Rat		
10213-79-3	Disodium metascilicate pentahydrate				
	oral	LD50 1152-1349 mg/kg	Rat		
	dermal	LD50 >5000 mg/kg	Rat		

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.

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.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Practical experience

Observations relevant to classification

not known

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
497-19-8	sodium carbonate						
	Acute fish toxicity	LC50	300 mg/l	96 h	Lepomis macrochirus		
	Acute crustacea toxicity	EC50	265 mg/l	48 h	Daphnia magna	IUCLID	
15630-89-4	Sodium percarbonate						
	Acute fish toxicity	LC50	70,7 mg/l	96 h	Pimephales promelas		
	Acute crustacea toxicity	EC50	4,9 mg/l	48 h	Daphnia pulex		
	Fish toxicity	NOEC	7,4 mg/l	4 d	Pimephales promelas		
	Crustacea toxicity	NOEC	2,0 mg/l	2 d	Daphnia pulex		
85536-14-7	2-DODECYLBENZENESULFONIC ACID						
	Acute fish toxicity	LC50	1-10 mg/l	96 h	Leopomis macrochrius		
	Acute algae toxicity	ErC50	1-10 mg/l	72 h	algae		
	Acute crustacea toxicity	EC50	1-10 mg/l	48 h	Daphnia pulex		
	Fish toxicity	NOEC	0,268 mg/l				
10213-79-3	Disodium metascilicate pentahydrate						
	Acute fish toxicity	LC50	210 mg/l	96 h	Brachydanio rerio		
	Acute algae toxicity	ErC50	207 mg/l	72 h	scenedesmus subspicatus		
	Acute crustacea toxicity	EC50	1700 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

The surfactants contained in the product are biodegradable according to the requirements of the Detergent Directive 648/2004/EC.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
85536-14-7	2-DODECYLBENZENESULFONIC ACID			
	Biological degradability	>60 %	28	
	DOC reduction.	>70 %		
69011-36-5	isotridecanol, ethoxylated			
	Biological degradability	90,1	28	OECD 301D

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
85536-14-7	2-DODECYLBENZENESULFONIC ACID	3,2-3,32

12.4. Mobility in soil

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

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. Other adverse effects

Product contains active chlorine and reacts strongly alkaline in aqueous solutions.
Product may contribute to the AOX-value from the waste water.

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

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.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

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

National regulatory information

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

Water hazard class (D): 2 - obviously 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): 1,2,3,4,5,6,7,8,9,11,12,13,15,16.

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
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
SVHC: Substance of Very High Concern
@1602.B016012

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

Classification	Classification procedure
Skin Corr. 1; H314	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
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. Notice the directions 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 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.)