

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

1.1 Product identifier

Trade name: Disinfectant Detergent (Desinfektionswaschmittel)

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

No further relevant information available.

Application of the substance / the mixture

Superconcentrated heavy-duty detergent for white textiles for application in hard and soft water at 30-60-90 °C. Phosphate free and NTA free.

1.3 Details of the supplier of the safety data sheet

HELLMUT RUCK GmbH

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e-Mail kontakt@hellmut-ruck.de

1.4 Emergency telephone number:

VIZ Universitätsklinikum Freiburg: Phone (24 h) +49 (0)761 19240

2 SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms



GHS05

Signal word Danger

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P280 Wear protective gloves / eye protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P402 Store in a dry place.

Additional information:

Contains perfume. May produce an allergic reaction.

2.3 Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

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3 SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

	perfumes	≤ 1 %
	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 13870-28-5 EINECS: 237-623-4	disodium disilicate Eye Dam. 1, H318 Specific concentration limits: Eye Dam. 1; H318: C ≥ 10 % Eye Irrit. 2; H319: 1 % ≤ C < 10 %	30-50 %
CAS: 15630-89-4 EINECS: 239-707-6	disodium carbonate, compound with hydrogenperoxide (2:3) Ox. Sol. 3, H272; Eye Dam. 1, H318; Acute Tox. 4, H302 Specific concentration limits: Eye Dam. 1; H318: C ≥ 25 % Eye Irrit. 2; H319: 7.5 % ≤ C < 25 %	15-30 %
CAS: 497-19-8 EINECS: 207-838-8	sodium carbonate Eye Irrit. 2, H319	5-15 %
CAS: 157627-86-6 NLP: 500-337-8	Alcohols C13-C15 branched and linear, ethoxylated Eye Dam. 1, H318; Acute Tox. 4, H302; Aquatic Chronic 3, H412 Specific concentration limits: Eye Dam. 1; H318: C ≥ 10 % Eye Irrit. 2; H319: 10 % ≤ C < 10 %	1-5 %
EC number: 932-051-8	Reaction product of Benzenesulfonic acid, 4-C10-13-sec- alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide Eye Dam. 1, H318; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	1-5 %
CAS: 157627-86-6 NLP: 500-337-8	Aliphatic alcohol, C13-15, predominantly linear, ethoxylated Eye Irrit. 2, H319; Aquatic Chronic 3, H412	1-5 %
CAS: 3794-83-0 EINECS: 223-267-7	tetrasodium (1-hydroxyethylidene) bisphosphonate Acute Tox. 4, H302; Eye Irrit. 2, H319	1-5 %

Ingredients according to detergent regulation EC 648/2004

oxygen-based bleaching agents	≥ 15 - < 30 %
non-ionic surfactants	≥ 5 - < 15 %
anionic surfactants, polycarboxylates, phosphonates, perfumes, optical brighteners, enzymes	< 5 %

Additional information: For the wording of the listed hazard phrases refer to section 16.

4 SECTION 4: First aid measures

4.1 Description of first aid measures

General information: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Rinse with warm water.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

Hazards Danger of gastric perforation.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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5 SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: Use normal protective clothing.

Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up

Dispose contaminated material as waste according to section 13.

6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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7 SECTION 7: Handling and storage

7.1 Precautions for safe handling

Prevent formation of dust.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Store in dry conditions.

Store in cool, dry conditions in well sealed receptacles.

Storage class: 13

7.3 Specific end use(s)

No further relevant information available.

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8 SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs

13870-28-5 disodium disilicate		
Oral	long term/systemic effects	1.59 mg/kg (general public)
Dermal	long term/systemic effects	159 mg/kg/Day (general public) 318 mg/kg/Day (Workers)
Inhalative	long term/systemic effects	2.39 mg/m ³ (general public) 11.12 mg/m ³ (Workers)
15630-89-4 disodium carbonate, compound with hydrogenperoxide (2:3)		
Dermal	Acute/local effects	6.4 mg/cm ² (Consumers) 12.8 mg/cm ² (Workers)
Inhalative	long term/local effects	5 mg/m ³ (Workers)
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		
Oral	short term/systemic effects	0.425 mg/kg (Consumers)
Dermal	long term/systemic effects	42.5 mg/kg/Day (Consumers) 85 mg/kg/Day (Workers)
Inhalative	long term/systemic effects	1.5 mg/m ³ (Consumers) 6 mg/m ³ (Workers)
PNECs		
13870-28-5 disodium disilicate		
Aqua	7.5 mg/l (Marine water) 7.5 mg/l (freshwater)	
Sediment	29.4 mg/kg (Marine water) 29.4 mg/kg (freshwater)	
15630-89-4 disodium carbonate, compound with hydrogenperoxide (2:3)		
Aqua	16.24 mg/l (Sewage treatment plant) 0.035 mg/l (freshwater)	
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		
Aqua	5.6 mg/l (Sewage treatment plant) 0.0268 mg/l (Marine water) 0.268 mg/l (Freshwater) 0.055 mg/l (intermittent release)	
Sediment	35 mg/kg (Soil) 8.1 mg/kg (Marine water) 8.1 mg/kg (Freshwater)	

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls

No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.

Be sure to clean skin thoroughly after work and before breaks.

Keep away from foodstuffs, beverages and food.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Respiratory protection

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

PVC or PE gloves

Recommended thickness of the material: ≥ 0.4 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Not suitable are gloves made of the following materials:

Leather gloves

Strong material gloves

Eye/face protection


Tightly sealed goggles

Body protection: Protective work clothing

9 SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state:	Solid
Colour:	White-blue powder
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range:	Undetermined.
Flammability:	Not determined.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH at 20 °C	11.4 (1%)
Viscosity	
Kinematic viscosity:	Not applicable.
Dynamic:	Not applicable.
Solubility	
Water:	Soluble.

Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure:	Not applicable.
Density and/or relative density	
Density at 20 °C:	0.78 g/cm ³
Relative density:	Not determined.
Vapour density:	Not applicable.

9.2 Other information

Appearance

Form: Powder

Important information on protection of health and environment, and on safety.

Ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Solvent content

Organic solvents: 0.0 %

Change in condition

Evaporation rate: Not applicable.

Information with regard to physical hazard classes

Explosives: Void

Flammable gases: Void

Aerosols: Void

Oxidising gases: Void

Gases under pressure: Void

Flammable liquids: Void

Flammable solids: Void

Self-reactive substances and mixtures: Void

Pyrophoric liquids: Void

Pyrophoric solids: Void

Self-heating substances and mixtures: Void

Substances and mixtures, which emit flammable gases in contact with water:

Void

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Oxidising liquids:	Void
Oxidising solids:	Void
Organic peroxides:	Void
Corrosive to metals:	Void
Desensitised explosives:	Void

10 SECTION 10: Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

No dangerous decomposition products known.

11 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.

LD/LC50 values relevant for classification

ATE (Acute Toxicity Estimates)

Oral	LD-50	3,364 mg/kg (rat)
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13870-28-5 disodium disilicate

Oral	LD-50	2,507 mg/kg (rat) (OECD 401)
Inhalative	LC-50/4 h	>3,510 mg/l (rat)

15630-89-4 disodium carbonate, compound with hydrogenperoxide (2:3)

Oral	LD-50	1,034 mg/kg (rat)
Dermal	LD-50	>2,000 mg/kg (rabbit)

497-19-8 sodium carbonate

Oral	LD-50	2,800 mg/kg (rat)
Dermal	LD-50	>2,000 mg/kg (rabbit) (EPA 16 CFR 1500.40 (Studienreport 1978))
Inhalative	LC-50/2 h	2,300 mg/m ³ (rat)

157627-86-6 Alcohols C13-C15 branched and linear, ethoxylated

Oral	LD-50	1,150 mg/kg (rat)
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Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

Oral	LD-50	2,000-5,000 mg/kg (rat) (OECD 401)
Dermal	LD-50	>2,000 mg/kg (rat) (OECD 402)

157627-86-6 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated

Oral	LD-50	>5,000 mg/kg (rat)
Dermal	LD-50	>2,000 mg/kg (rat) (OECD 402)

3794-83-0 tetrasodium (1-hydroxyethylidene) bisphosphonate

Oral	LD-50	1,100 mg/kg (rat)
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Serious eye damage/irritation

Causes serious eye damage.

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

12 SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

13870-28-5 disodium disilicate	
LC-50 48 h	491 mg/L (Daphnia magna)
EC-50 3 h	720 mg/l (Belebtschlamm)
EC-50 48h	491 mg/l (Daphnia magna) (OECD 202)
LC-50 96h	>500 mg/l (Brachydanio rerio)
NOEC (72 h)	18 mg/l (Scenedesmus subspicatus)
15630-89-4 disodium carbonate, compound with hydrogenperoxide (2:3)	
EC-50 48h	4.9 mg/l (Daphnia pulex)
EC-50 96h	70.7 mg/l (Pimephales promelas)
EC-50 140h	8 mg/l (Alge)
NOEC (48h)	2 mg/l (Daphnia pulex)
NOEC (96h)	7.4 mg/l (Daphnia pulex)
497-19-8 sodium carbonate	
EC-50 48h	200-227 mg/l (Ceriodaphnia sp.) (Mobilität) 256 mg/l (Daphnia magna)
LC-50 96h	300 mg/l (Blauer Sonnenbarsch) 740 mg/l (gam) 300 mg/l (Lepomis macrochirus) (Wirkungsgrundlage: Sterblichkeit)
157627-86-6 Alcohols C13-C15 branched and linear, ethoxylated	
EC-10	>1,000 mg/L (Belebtschlamm)
EC-50 48h	1-10 mg/l (Daphnia magna) (Literaturangabe)
EC-50 72h	1-10 mg/l (Scenedesmus subspicatus) (Literaturangabe)
LC-50 96h	1-10 mg/l (Brachydanio rerio)
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide	
EC-50 17 h	63 mg/L (Pseudomonas putida) (ISO 10712)
EC-50 48h (static)	>1-10 mg/l (Daphnia magna) (OECD 202)
EC-50 72h (static)	>10-100 mg/l (Desmodesmus subspicatus) (OECD 201)
LC-50 96h	>1-10 mg/l (Cyprinus carpio) (OECD 203)
NOEC 21 d	>1-10 mg/l (Daphnia magna) (OECD 211)
NOEC (72 d)	>0.1-1 mg/L (Oncorhynchus mykiss) (Durchflusstest)
157627-86-6 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated	
EC-10 16 h	>10,000 mg/L (Pseudomonas putida)
EC-50 48h	0.1-1 mg/l (Daphnia magna) (Richtlinie 79/831/EWG)
EC-50 72h	0.1-1 mg/l (Scenedesmus subspicatus) (OECD 201)
LC-50 96h	1-10 mg/l (Brachydanio rerio)
3794-83-0 tetrasodium (1-hydroxyethylidene) bisphosphonate	
EC-50 96h	>170 mg/l (Daphnia magna)
LC-50 96h	>100 mg/l (Oncorhynchus mykiss)

12.2 Persistence and degradability

No further relevant information available.

Other information:

The product is biodegradable.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects**Additional ecological information:****General notes:**

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Do not allow product to reach ground water, water course or sewage system.

The product may not be released into the environment without control.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pHvalues.

A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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13 SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation: Dispose of in accordance with Local, State, and Federal Regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 SECTION 14: Transport information

14.1 UN number or ID number

ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA Class Void

14.4 Packing group

ADR, IMDG, IATA Void

14.5 Environmental hazards

Marine pollutant: No

14.6 Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

UN "Model Regulation": Void

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15 SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I

None of the ingredients is listed.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

16 SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The information of Items 4 through 8 and 10 through 12 partially refers not to the use and the proper application of the product (see Directions for Use/Product Information) but to the release of larger quantities in the case of accidents and irregularities.

The information exclusively describes the safety requirements of the product(s) and is based on the present state of our experience.

Non-ionic tensides can have varying characteristics and classifications despite same CAS-No.

Relevant phrases

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

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Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Ox. Sol. 3: Oxidizing solids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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