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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 21.08.2015 / 0010

Replacing version dated / version: 23.02.2015 / 0009

Valid from: 21.08.2015 PDF print date: 28.08.2015 Universal-Reinger extrem 11 kg

Art.: 8190

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

1.1 Product identifier

Universal-Reinger extrem 11 kg

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

Cleaner

Sector of use [SU]:

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 - Consumer uses: Private households (=general public = consumers)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC35 - Washing and cleaning products (including solvent based products)

Process category [PROC]:

PROC 7 - Industrial spraying

PROC 9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC10 - Roller application or brushing

PROC11 - Non industrial spraying

PROC19 - Hand-mixing with intimate contact and only PPE available

Article Categories [AC]:

AC99 - Not required.

Environmental Release Category [ERC]:

ERC 4 - Industrial use of processing aids in processes and products, not becoming part of articles

ERC 8a - Wide dispersive indoor use of processing aids in open systems

ERC 8d - Wide dispersive outdoor use of processing aids in open systems

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

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LIQUI MOLY GmbH, Jerg-Wieland-Str. 4, 89081 Ulm-Lehr, Germany

Phone: (+49) 0731-1420-0, Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class Hazard category Hazard statement

Skin Irrit. 2 H315-Causes skin irritation.



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Eye Dam.

H318-Causes serious eye damage.

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)



Danger

H315-Causes skin irritation. H318-Causes serious eye damage.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

P280-Wear protective gloves and eye protection/face 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. P310-Immediately call a POISON CENTER/doctor.

Ethoxylated isotridecanol Sodium hydroxide Disodium metasilicate

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006

High pH-value can be harmful to water.

REGULATION (EC) No 648/2004

less than 5 % non-ionic surfactants NTA (nitrilotriacetic acid) and salts thereof

perfumes CITRONELLOL **HEXYL CINNAMAL**

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a. 3.2 Mixture

Trisodium nitrilotriacetate, solution	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	225-768-6
CAS	5064-31-3
content %	1-<10



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Classification according to Regulation (EC) 1272/2008 (CLP)	Eye Irrit. 2, H319
	Carc. 2, H351
	Met. Corr. 1, H290

Sodium p-cumenesulphonate	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	239-854-6
CAS	15763-76-5
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP)	Eye Irrit. 2, H319

Disodium metasilicate	
Disodium metasincate	
Registration number (REACH)	
Index	014-010-00-8
EINECS, ELINCS, NLP	229-912-9
CAS	6834-92-0
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Corr. 1B, H314
	STOT SE 3, H335

Ethoxylated isotridecanol	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	931-138-8 (REACH-IT List-No.)
CAS	69011-36-5
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302
	Eye Dam. 1, H318

Sodium hydroxide	
Registration number (REACH)	01-2119457892-27-XXXX
Index	011-002-00-6
EINECS, ELINCS, NLP	215-185-5
CAS	1310-73-2
content %	0,5-<2
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Corr. 1A, H314

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

Total C below classification limit.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.

Protect uninjured eye.

Consult medical specialist.

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.



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4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

There should be an eyewash station and safety shower located near the area of use.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

Product is not combustible.

Adapt to the nature and extent of fire.

Unsuitable extinguishing media

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of nitrogen

Oxides of sulphur

Toxic gases

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Alkali-resistant protection clothing.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

Neutralising is possible (only from a specialist).

Diluting with water is possible.

Flush residue using copious water.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Avoid contact with eyes or skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.



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Use working methods according to operating instructions. 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Alkali-resistant floor necessary.

Do not store with oxidizing agents.

Do not store with acids.

Store at room temperature.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	Sodium hydroxide	Content %:0,5-<2
WEL-TWA:	WEL-STEL: 2 mg/m3	
Monitoring procedures:	ISO 15202 (Determination of metals and metalloids in airborne p	particulate matter by
	inductive coupled plasma emission spectrometry) - 2000(Part 1)	, 2001(Part 2), 2004
	- (Part 3)	
	DFG (E), DFG (D) (Alkali metal hydroxides and alkali earth hydroxides)	oxides) - 2001, 1998 -
	 EU project BC/CEN/ENTR/000/2002-16 card 45-2 (2004) 	
	OSHA ID-121 (Metal and metalloid particulates in workplace atm	nospheres) - 2002 - EU
	 project BC/CEN/ENTR/000/2002-16 card 45-5 (2004) 	. ,
	- NIOSH 7401 (Alkaline dusts) - 1994	
BMGV:	Other information:	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

^{** =} The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
Consumer	Human - oral	Long term, systemic effects	DNEL	0,5	mg/kg	
Industrial / commercial	Human - inhalation	Short term, systemic effects	DNEL	5,25	mg/m3	
Industrial / commercial	Human - inhalation	Short term, local effects	DNEL	5,25	mg/m3	
Consumer	Human - inhalation	Short term, local effects	DNEL	1,75	mg/m3	
Industrial / commercial	Human - inhalation	Long term, systemic effects	DNEL	3,5	mg/m3	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	1,75	mg/m3	
Industrial / commercial	Human - inhalation	Long term, local effects	DNEL	3,5	mg/m3	
	Environment - freshwater		PNEC	0,93	mg/l	
	Environment - sediment, marine		PNEC	0,364	mg/kg	
	Environment - oral (animal feed)		PNEC	0,2	mg/kg	



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Environment - soil	PNEC	0,182	mg/kg
Environment - sediment,	PNEC	3,64	mg/kg
freshwater			
Environment - sewage	PNEC	540	mg/l
treatment plant			
Environment - marine	PNEC	0,093	mg/l

Disodium metasilicate						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1,49	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	6,22	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,74	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,55	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,74	mg/kg bw/day	
	Environment - freshwater		PNEC	7,5	mg/l	
	Environment - marine		PNEC	1	mg/l	
spo	Environment - water, sporadic (intermittent) release		PNEC	7,5	μg/l	
	Environment - sewage treatment plant		PNEC	1000	mg/l	

Sodium hydroxide						
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
Workers / employees	Human - inhalation	Long term, local effects	DNEL	1	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	1	mg/m3	·

Sodium p-cumenesulpho			T = 1.		1.1.1	
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	7,6	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	53,6	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	3,8	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	13,2	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	3,8	mg/kg bw/day	
	Environment - freshwater		PNEC	0,23	mg/l	
	Environment - sporadic (intermittent) release		PNEC	2,3	mg/l	
	Environment - sewage treatment plant		PNEC	100	mg/l	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.



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If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

If applicable

Face protection (EN 166)

Skin protection - Hand protection:

Use alkali resistant protective gloves (EN 374).

Recommended

Protective gloves in butyl rubber (EN 374).

Minimum layer thickness in mm:

0,7

Permeation time (penetration time) in minutes:

>480

Protective hand cream recommended.

The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:

Alkali-resistant protection clothing (EN 13034)

Respiratory protection:

Normally not necessary.

In aerosol misting:

Filter B P3 (EN 14387)

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid Colour: Green Odour: Fruity

Odour threshold: Not determined pH-value: 12,8

Melting point/freezing point:

Not determined Initial boiling point and boiling range: >97 °C Flash point: n.a.

Evaporation rate: Not determined Flammability (solid, gas): Not determined



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Lower explosive limit: n.a. Upper explosive limit: n.a.

Vapour pressure:Not determinedVapour density (air = 1):Not determinedDensity:1,05 g/ml (20°C)Bulk density:Not determinedSolubility(ies):Not determinedWater solubility:MixablePartition coefficient (n-octanol/water):Not determined

Auto-ignition temperature: No

Decomposition temperature:

Viscosity:

Not determined

Not determined

Viscosity: Not determined Explosive properties: Product is not explosive.

Oxidising properties:

9.2 Other information

Miscibility:

Fat solubility / solvent:

Conductivity:

Not determined

Not determined

Not determined

Surface tension:

Not determined

Not determined

Not determined

Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No decomposition if used as intended.

10.4 Conditions to avoid

See also section 7.

10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

Avoid contact with strong acids.

Avoid contact with certain metals e.g. aluminium (development of hydrogen gas possible).

Avoid contact with alkali sensitive materials.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoin t	Value	Unit	Organism	Test method	Notes	
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value	
Acute toxicity, by dermal route:						n.d.a.	
Acute toxicity, by inhalation:						n.d.a.	
Skin corrosion/irritation:				Rat	OECD 431 (In Vitro Skin Corrosion - Human Skin Model Test)	Non-caustic	
Serious eye damage/irritation:						n.d.a.	
Respiratory or skin sensitisation:						n.d.a.	
Germ cell mutagenicity:						n.d.a.	
Carcinogenicity:						n.d.a.	



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Reproductive toxicity:		n.d.a.
Specific target organ toxicity -		n.d.a.
single exposure (STOT-SE):		
Specific target organ toxicity -		n.d.a.
repeated exposure (STOT-RE):		
Aspiration hazard:		n.d.a.
Symptoms:		n.d.a.
Other information:		Classification according
		to calculation procedure.

Trisodium nitrilotriacetate, solution							
Toxicity / effect	Endpoin	Value	Unit	Organism	Test method	Notes	
	τ						
Acute toxicity, by oral route:	LD50	3900	mg/kg	Rat			
Skin corrosion/irritation:				Rabbit		Not irritant	
Serious eye damage/irritation:				Rabbit		Irritant	
Respiratory or skin sensitisation:						Not sensitizising	

Toxicity / effect	Endpoin t	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>7000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	· ·	
Acute toxicity, by inhalation:	LC50	>5	mg/l/4h	Rat		Aerosol
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitizising
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:				Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative
Reproductive toxicity:	NOAEL	>936	mg/kg	Rat	,	
Aspiration hazard:						n.a.
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	763	mg/kg	Rat		Target organ(s): heart, References
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	763-3534	mg/kg		OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	>440	mg/kg		OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	LOAEL	1300	mg/kg bw/d	Mouse	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	

Disodium metasilicate								
Toxicity / effect	Endpoin	Value	Unit	Organism	Test method	Notes		
	t							
Acute toxicity, by oral route:	LD50	600-1350	mg/kg	Rat		Does not conform with EU classification.		



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Skin corrosion/irritation:	Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Corrosive
Serious eye damage/irritation:	Rabbit	,	Corrosive
Germ cell mutagenicity:		OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:			burning of the membranes of the nose and throat, vomiting, cornea opacity, coughing, mucous membrane irritation
Specific target organ toxicity - single exposure (STOT-SE), inhalative:			Irritation of the respiratory tract

Toxicity / effect	Endpoin t	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>300-2000	mg/kg	Rat		References
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat		References
Skin corrosion/irritation:				Rabbit		Not irritant, References
Serious eye damage/irritation:				Rabbit		Intensively irritant, References
Respiratory or skin sensitisation:				Guinea pig		Negative, References
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative, References
Reproductive toxicity:	NOAEL	>250	mg/kg bw/d	Rat	OECD 416 (Two- generation Reproduction Toxicity Study)	References
Aspiration hazard:						n.a.
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	50	mg/kg bw/d	Rat		Target organ(s): heart, Target organ(s): liver, Target organ(s): kidneys References

Sodium hydroxide						
Toxicity / effect	Endpoin t	Value	Unit	Organism	Test method	Notes
Acute toxicity, by dermal route:						n.d.a.
Skin corrosion/irritation:				Rabbit		Corrosive
Serious eye damage/irritation:				Rabbit		Corrosive, Risk of serious damage to eyes.
Respiratory or skin sensitisation:				Human being	(Patch-Test)	Not sensitizising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 472 (Genetic Toxicology - Escherichia coli, Reverse Assay)	Negative, References
Reproductive toxicity:						No
Symptoms:						breathing difficulties, coughing

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

Universal-F	Universal-Reinger extrem 11 kg									
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Toxicity / e	fect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
Toxicity to f	sh:							n.d.a.		



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Taviaituta danbaia:		
Toxicity to daphnia:		n.d.a.
Toxicity to algae:		n.d.a.
Persistence and		The surfactant(s)
degradability:		contained in this mixture
,		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.
Bioaccumulative		n.d.a.
potential:		
Mobility in soil:		n.d.a.
Results of PBT and		n.d.a.
vPvB assessment		
Other adverse effects:		n.d.a.
Other information:		According to the recipe,
		contains no AOX.

Trisodium nitrilotriace	Trisodium nitrilotriacetate, solution								
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
Toxicity to fish:	LC50	96h	>500	mg/l	Leuciscus idus				
Toxicity to daphnia:	EC50	48h	>100	mg/l			References		
Toxicity to algae:	EC50	72h	>100	mg/l			References		
Persistence and degradability:			>90	%		OECD 302 B (Inherent Biodegradability - Zahn- Wellens/EMPA Test)			
Bioaccumulative potential:	Log Pow		> -2,6				Bioaccumulation is unlikely (LogPow < 1). 20°C		
Results of PBT and							No PBT substance, No		
vPvB assessment							vPvB substance		
Other information:	BOD5		<5	mg/g					
Other information:	COD		160	mg/g					
Water solubility:							Soluble		

Sodium p-cumenesul	Sodium p-cumenesulphonate								
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
Toxicity to fish:	LC50	96h	>100	mg/l	Cyprinus caprio	OECD 203 (Fish,			
						Acute Toxicity			
						Test)			
Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202			
						(Daphnia sp.			
						Acute			
						Immobilisation			
						Test)			
Toxicity to algae:	EC50	72h	>100	mg/l	Desmodesmus	OECD 201			
_					subspicatus	(Alga, Growth			
						Inhibition Test)			



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Persistence and degradability:		28d	>60	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
Bioaccumulative potential:	Log Pow		-1,1				Bioaccumulation is unlikely (LogPow < 1).
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Disodium metasilicate							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>2320	mg/l	Gambusia affinis		
Toxicity to fish:	LC50	96h	4857	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EC50	48h	4857	mg/l	Daphnia magna		
Persistence and degradability:							Readily biodegradable
Water solubility:			175000	mg/l			20°C

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	1 - 10	mg/l	Cyprinus caprio	OECD 203 (Fish, Acute Toxicity Test)	References
Toxicity to fish:	LC50	96h	10-100	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EC50	48h	>1-10	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	References
Toxicity to algae:	EC50	72h	>1-10	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	References
Toxicity to algae:	EC50	72h	10-100	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:		28d	>60	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	References
Persistence and degradability:		28d	>70	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	References
Mobility in soil:	Kow		>5000			,	Adsorption in ground.
Results of PBT and vPvB assessment							No PBT substance
Toxicity to bacteria:	EC50		>10000	mg/l	Pseudomonas putida	ISO 10712	



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Toxicity to annelids:	LC50	14d	>1000	mg/kg	Eisenia foetida	OECD 207	
						(Earthworm,	
						Acute Toxicity	
						Tests)	

Sodium hydroxide							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	125	mg/l	Gambusia affinis		
Toxicity to daphnia:	EC50	48h	40,4	mg/l	Ceriodaphnia		
				-	spec.		
Persistence and							Not relevant for inorganic
degradability:							substances.
Bioaccumulative							Negative
potential:							
Toxicity to bacteria:	EC50	15min	22	mg/l	Photobacterium		
					phosphoreum		
Water solubility:			1090-	g/l			20°C
			1260				

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

07 06 01 aqueous washing liquids and mother liquors

20 01 29 detergents containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

UN number: n.a.

Transport by road/by rail (ADR/RID)

UN proper shipping name:

Transport hazard class(es):

Packing group:

Classification code:

LQ (ADR 2015):

n.a.

n.a.

Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

UN proper shipping name:

Transport hazard class(es):

Packing group:

Marine Pollutant:

n.a.

Environmental hazards: Not applicable

Transport by air (IATA)



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UN proper shipping name:

Transport hazard class(es): Packing group: n.a.

Environmental hazards: Not applicable

Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

Transport in bulk according to Annex II of MARPOL and the IBC Code

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

National rules/regulation for the compliance with maximum quantities with regard to phosphates and or phosphorous compounds must be observed and complied with.

For classification and labelling see Section 2.

Comply with trade association/occupational health regulations.

Observe restrictions:

Observe youth employment law (German regulation).

Directive 2010/75/EU (VOC):

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

1 - 16

n.a.

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation	Evaluation method used
(EC) No. 1272/2008 (CLP) Skin Irrit. 2, H315	Classification based on test data.
Eye Dam. 1, H318	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H314 Causes severe skin burns and eye damage.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

 ${\rm Skin\ Irrit.} - {\rm Skin\ irritation}$

Eye Dam. — Serious eye damage

Eye Irrit. — Eye irritation

Carc. — Carcinogenicity

Met. Corr. — Substance or mixture corrosive to metals Skin Corr. — Skin corrosion

STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation

Acute Tox. — Acute toxicity - oral

Any abbreviations and acronyms used in this document:



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AC **Article Categories**

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the

International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level

Adsorbable organic halogen compounds AOX

approx. approximately

Article number Art., Art. no.

Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP) ATE

Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM

Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BAuA

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol) BHT BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

body weight bw

CAS Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and

mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

Chemical oxygen demand COD

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon

Dwell Time - 50% reduction of start concentration DT50

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dry weight dw

e.g. EC for example (abbreviation of Latin 'exempli gratia'), for instance

European Community ECHA European Chemicals Agency EEA European Economic Area EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

Furopean Norms FΝ

EPA United States Environmental Protection Agency (United States of America)

ERC Environmental Release Categories

ES Exposure scenario

et cetera etc. EU **European Union**

EWC European Waste Catalogue

Fax. Fax number general aen.

Globally Harmonized System of Classification and Labelling of Chemicals GHS

GWP Global warming potential

Hen's Egg Test - Chorionallantoic Membrane **HET-CAM**

HGWP Halocarbon Global Warming Potential International Agency for Research on Cancer IARC International Air Transport Association IATA

Intermediate Bulk Container **IBC**

IBC (Code) International Bulk Chemical (Code)

IC Inhibitory concentration

IMDG-code International Maritime Code for Dangerous Goods

including, inclusive incl.

IUCLID International Uniform Chemical Information Database

LC lethal concentration



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LC50 lethal concentration 50 percent kill LCLo lowest published lethal concentration

LD Lethal Dose of a chemical LD50 Lethal Dose, 50% kill LDLo Lethal Dose Low

LOAEL Lowest Observed Adverse Effect Level LOEC Lowest Observed Effect Concentration LOEL Lowest Observed Effect Level

LOEL Lowest Observed Effect

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable n.av. not available n.c. not checked n.d.a. no data available

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAEC No Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level NOEC No Observed Effect Concentration NOEL No Observed Effect Level ODP Ozone Depletion Potential

OECD Organisation for Economic Co-operation and Development

org. organic

PAH polycyclic aromatic hydrocarbon
PBT persistent, bioaccumulative and toxic

PC Chemical product category

PE Polyethylene

PNEC Predicted No Effect Concentration
POCP Photochemical ozone creation potential

ppm parts per million PROC Process category PTFE Polytetrafluorethylene

REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration,

Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

ThOD Theoretical oxygen demand TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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