

Page 1 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 06.03.2019 / 0018 Replacing version dated / version: 14.09.2018 / 0017 Valid from: 06.03.2019 PDF print date: 06.03.2019 Universal-Reiniger 20 L Art.: 1655

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

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

1.1 Product identifier

Universal-Reiniger 20 L

Art.: 1655

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

Cleaner

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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

Process category [PROC]:

PROC 7 - Industrial spraying

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

PROC10 - Roller application or brushing

PROC11 - Non industrial spraying

PROC19 - Manual activities involving hand contact

Article Categories [AC]: AC99 - Not required.

Environmental Release Category [ERC]:

ERC 4 - Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC 8a - Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC 8d - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

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 mixtureClassification according to Regulation (EC) 1272/2008 (CLP)Hazard classHazard categoryHazard statementEye Irrit.2H319-Causes serious eye irritation.



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



H319-Causes serious eye irritation.

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

P280-Wear 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. P337+P313-If eye irritation persists: Get medical advice / attention.

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 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

High pH-value can be harmful to water.

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 %	10-<20
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-<20
Classification according to Regulation (EC) 1272/2008 (CLP)	Eye Irrit. 2, H319
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	Substance with specific conc. limit(s) acc. to REACh-
	registration
Registration number (REACH)	01-2119488639-16-XXXX
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EINECS, ELINCS, NLP	500-234-8 (NLP)
CAS	68891-38-3
content %	1-5
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Irrit. 2, H315
	Eye Dam. 1, H318
	Aquatic Chronic 3, H412

Isotridecanol, ethoxylated	
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

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

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

For substances that are listed in appendix VI, table 3.1 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

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

Not required.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.

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

Protect uninjured eye.

Follow-up examination by an ophthalmologist

Ingestion

Rinse the mouth thoroughly with water.

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

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.

With long-term contact: Irritation of the skin.

4.3 Indication of any immediate medical attention and special treatment needed n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media

None known

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Oxides of nitrogen



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Oxides of sulphur Toxic gases

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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 Full protection, if necessary. 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.

6.3 Methods and material for containment and cleaning up

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

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. 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. Store product closed and only in original packing. Not to be stored in gangways or stair wells. Alkali-resistant floor necessary. Do not use alkali sensitive materials. Stability during storage:

min. 36 months.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters



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Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater Environment - sediment,		PNEC PNEC	0,93 0,364	mg/l mg/kg	
	marine Environment - oral (animal feed)		PNEC	0,2	mg/kg	
	Environment - soil		PNEC	0,182	mg/kg	
	Environment - sediment, freshwater		PNEC	3,64	mg/kg	
	Environment - sewage treatment plant		PNEC	540	mg/l	
	Environment - marine		PNEC	0,093	mg/l	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,5	mg/kg	
Consumer	onsumer Human - inhalation		DNEL	1,75	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	
Industrial / commercial	Human - inhalation	Long term, systemic effects	DNEL	3,5	mg/m3	
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	

Sodium p-cumenesulpho	nate					
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - freshwater		PNEC	0,23	mg/l	
	Environment - sporadic (intermittent) release		PNEC	2,3	mg/l	
	Environment - sewage treatment plant		PNEC	100	mg/l	
	Environment - marine		PNEC	0,023	mg/l	
	Environment - sediment, freshwater		PNEC	0,862	mg/kg	
Consumer Human - dermal		Long term, systemic effects	DNEL	68,1	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	6,6	mg/m3	
Consumer Human - oral		Long term, systemic effects	DNEL	3,8	mg/kg bw/day	
Workers / employees	orkers / employees Human - dermal		DNEL	136,25	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	26,9	mg/m3	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,096	mg/cm2	

Alcohols, C12-14, ethoxylated, sulfates, sodium salts									
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note			
	Environmental								
	compartment								
	Environment - freshwater		PNEC	0,24	mg/l				
	Environment - periodic		PNEC	0,13	mg/l				
	release								
	Environment - marine		PNEC	0,024	mg/l				



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	Environment - sediment, freshwater		PNEC	5,45	mg/kg dry weight
	Environment - sediment, marine		PNEC	0,545	mg/kg dry weight
	Environment - sewage treatment plant		PNEC	10000	mg/l
	Environment - soil		PNEC	0,946	mg/kg dry weight
	Environment - sporadic (intermittent) release		PNEC	0,071	mg/l
	Environment - sediment, freshwater	Short term	PNEC	0,917	mg/kg
	Environment - sediment, marine	Short term	PNEC	0,092	mg/kg
	Environment - soil	Short term	PNEC	7,5	mg/kg
Consumer	Human - dermal	Long term, local effects	DNEL	0,079	mg/cm2
Consumer	Human - oral	Long term, systemic effects	DNEL	15	mg/kg bw/day
Consumer	Human - dermal	Long term, systemic effects	DNEL	1650	mg/kg bw/day
Consumer	Human - inhalation	Long term, systemic effects	DNEL	52	mg/m3
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	2750	mg/kg bw/day
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	175	mg/m3
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,132	mg/cm2

Area of application	Exposure route / Environmental	Effect on health	Descriptor	Value	Unit	Note
	compartment		DNEO	0.00		
	Environment - freshwater		PNEC	0,32	mg/l	
	Environment - marine		PNEC	0,032	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	5,12	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	1,7	mg/kg	
	Environment - sediment, marine		PNEC	0,17	mg/kg	
	Environment - soil		PNEC	0,151	mg/kg dry weight	
Consumer	Human - dermal	Long term, systemic effects	DNEL	3,1	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	13	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,25	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	1,25	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	6,3	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	5	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5	mg/m3	

8.2 Exposure controls8.2.1 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).

Skin protection - Hand protection: Recommended Protective gloves in butyl rubber (EN 374). Minimum layer thickness in mm: >= 0,5 Permeation time (penetration time) in minutes: > 120 Protective hand cream recommended. The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection: Normally not necessary.

Thermal hazards: Not applicable

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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:	Lemon
Odour threshold:	Not determined
pH-value:	12,4
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	>100 °C
Flash point:	n.a.
Evaporation rate:	Not determined
Flammability (solid, gas):	No
Lower explosive limit:	n.a.
Upper explosive limit:	n.a.
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	1,05 g/ml (20°C)



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Bulk density: Solubility(ies): Water solubility: Partition coefficient (n-octanol/water): Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties: Oxidising properties:

9.2 Other information

Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content: Not determined Not determined Mixable Not determined Not determined Not determined Not determined Not determined No

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 dangerous reactions are known. **10.4 Conditions to avoid** None known **10.5 Incompatible materials** None known **10.6 Hazardous decomposition products** 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).

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated valu
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:					OECD 431 (In Vitro Skin Corrosion - Human Skin Model Test)	Non-caustic, Analogous conclusion
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.



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Other information:			Classification according to
			calculation
			procedure.

Acute toxicity, by oral route: LD5 Acute toxicity, by dermal route: LD5 Acute toxicity, by inhalation: LC5 Skin corrosion/irritation: LC5 Skin corrosion/irritation: Serious eye damage/irritation: Serious eye damage/irritation: Serious eye damage/irritation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: NOA Aspiration hazard: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: NOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: LOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: LOA		7000		Organism		Notes
Acute toxicity, by inhalation: LC5 Skin corrosion/irritation: Serious eye damage/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: NOA Aspiration hazard: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: NOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: LOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: LOA	-	>7000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by inhalation: LC5 Skin corrosion/irritation: Serious eye damage/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: NOA Aspiration hazard: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: NOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: LOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: LOA)	>2000	mg/kg	Rabbit		
Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Carcinogenicity: Specific target organ toxicity - repeated exposure (STOT-RE), oral:		>5	mg/l/4h	Rat		Aerosol
Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Aspiration hazard: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: LOA dermal:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Carcinogenicity: NOA Aspiration hazard: Specific target organ toxicity - repeated exposure (STOT-RE), oral: NOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: NOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: NOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: NOA Specific target organ toxicity - repeated exposure (STOT-RE), oral: NOA Specific target organ toxicity - repeated exposure (STOT-RE), dermal: LOA				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Irritant
Germ cell mutagenicity: Carcinogenicity: Carcinogenicity: Reproductive toxicity: Aspiration hazard: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), dermal:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact
Reproductive toxicity: NOA Aspiration hazard: Specific target organ toxicity - Specific target organ toxicity - NOA repeated exposure (STOT-RE), NOA oral: NOA Specific target organ toxicity - NOA repeated exposure (STOT-RE), NOA oral: Specific target organ toxicity - repeated exposure (STOT-RE), NOA oral: LOA specific target organ toxicity - repeated exposure (STOT-RE), dermal: LOA				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Aspiration hazard: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), dermal:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Aspiration hazard: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), dermal:				Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative
Specific target organ toxicity - NOA repeated exposure (STOT-RE), NOA oral: Specific target organ toxicity - repeated exposure (STOT-RE), NOA oral: Specific target organ toxicity - Specific target organ toxicity - NOA oral: Specific target organ toxicity - Specific target organ toxicity - LOA repeated exposure (STOT-RE), dermal:	.EL	>936	mg/kg	Rat		
repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), dermal:						n.a.
repeated exposure (STOT-RE), oral: Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	EL	763-3534	mg/kg		OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
repeated exposure (STOT-RE), dermal:		763	mg/kg	Rat		Target organ(s): heart, References
Specific target organ toxicity - NOA		1300	mg/kg bw/d	Mouse	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	
repeated exposure (STOT-RE), dermal:	EL	>440	mg/kg		OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	
			1			
Alcohols, C12-14, ethoxylated, sulfate Toxicity / effect End	es, sodi	um salts Value	Unit	Organism	Test method	Notes

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	4100	mg/kg	Rat	OECD 401 (Acute Oral	
					Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	
					Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Irritant
					Dermal	
					Irritation/Corrosion)	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Risk of serious
					Irritation/Corrosion)	damage to eyes.
Serious eye damage/irritation:		>=10	%			Eye Dam. 1
Serious eye damage/irritation:		>=5	%			Eye Irrit. 2
Respiratory or skin				Guinea pig	OECD 406 (Skin	Not sensitizising
sensitisation:					Sensitisation)	
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative
· · ·					Reverse Mutation Test)	-



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Germ cell mutagenicity:					OECD 475 (Mammalian	Negative
6 ,					Bone Marrow	
					Chromosome	
					Aberration Test)	
Germ cell mutagenicity:					OECD 476 (In Vitro	Negative
					Mammalian Cell Gene	
					Mutation Test)	
Reproductive toxicity:	NOAEL	>1000	mg/kg	Rat	OECD 414 (Prenatal	Negative,
					Developmental Toxicity	References
					Study)	
Reproductive toxicity:	NOAEL	>300	mg/kg	Rat	OECD 416 (Two-	Negative,
					generation	References
					Reproduction Toxicity	
					Study)	
Aspiration hazard:						No
Symptoms:						mucous
						membrane
						irritation
Specific target organ toxicity -	NOAEL	>225	mg/kg	Rat	OECD 408 (Repeated	Target organ(s):
repeated exposure (STOT-RE),					Dose 90-Day Oral	liver, References
oral:					Toxicity Study in	
					Rodents)	

Isotridecanol, ethoxylated						
Toxicity / effect	Endpoint	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		Eye Dam.
						1>10% solution
Respiratory or skin				Guinea pig		Negative,
sensitisation:						References
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative,
					Reverse Mutation Test)	References
Reproductive toxicity:	NOAEL	>250	mg/kg	Rat	OECD 416 (Two-	References
			bw/d		generation	
					Reproduction Toxicity	
					Study)	- NI
Aspiration hazard:						No
Specific target organ toxicity -	NOAEL	50	mg/kg	Rat		Target organ(s):
repeated exposure (STOT-RE),			bw/d			heart, Target
oral:						organ(s): liver,
						Target organ(s):
						kidneys,
						References

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).							
Universal-Reiniger 20 L							
Art.: 1655							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.



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12.2. Persistence and	The surfacta	ant(s
degradability:	contained in	n this
	mixture	
	complies(co	omply
	with the	
	biodegradat	bility
	criteria as la	aid
	down in	
	Regulation	
	No.648/200	
	detergents.	
	to support the	
	assertion ar	re
	held at the	
	disposal of t	the
	competent	
	authorities of	
	Member Sta	
	and will be r	
	available to	
	them, at the	
	direct reque	
	at the reque	
	a detergent	
12.3. Bioaccumulative	manufacture	er.
	n.d.a.	
potential: 12.4. Mobility in soil:	n.d.a.	
12.5. Results of PBT	n.d.a.	
and vPvB assessment	11.u.a.	
12.6. Other adverse	n.d.a.	
effects:	II.u.a.	
Other information:	According to	to the
	recipe, cont	
	no AOX.	

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Cyprinus caprio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	>60	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		-1,1				Bioaccumulation is unlikely (LogPow < 1).



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Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium
						Oxidation))

Alcohols, C12-14, ethoxy Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.2. Persistence and degradability:	DOC	28d	100	%	activated sludge	Regulation (EC) 440/2008 C.4-C (DETERMINATIO N OF 'READY' BIODEGRADABILI TY - CO2 EVOLUTION TEST)	Readily biodegradable
12.1. Toxicity to fish:	NOEC/NOEL	28d	0,2	mg/l	Oncorhynchus mykiss	OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study)	
12.1. Toxicity to fish:	LC50	96h	7,1	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,27	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	7,2	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	NOEC/NOEL	96h	0,95	mg/l		OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC50	72h	2,6	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	95	%		OECD 301 E (Ready Biodegradability - Modified OECD Screening Test)	Readily biodegradable
12.2. Persistence and degradability:		28d	>70	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		-1,38				Low
12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment	Koc		191				calculated valu No PBT substance
Toxicity to bacteria:	EC50	16h	>10	g/l	Pseudomonas putida	DIN 38412 T.8	
Isotridecanol, ethoxylate	d						
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes	
12.5. Results of PBT							No PBT	
and vPvB assessment							substance, No	
							vPvB substance	



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LC50 12.1. Toxicity to fish: 96h 10-100 Brachydanio rerio OECD 203 (Fish, mg/l Acute Toxicity Test) 12.1. Toxicity to fish: LC50 96h OECD 203 (Fish, 1 - 10 mg/l Cyprinus caprio References Acute Toxicity Test) OEĆD 202 12.1. Toxicity to daphnia: EC50 48h >1-10 mg/l Daphnia magna References (Daphnia sp. Acute Immobilisation Test) 12.1. Toxicity to daphnia: EC10 21d 2,6 mg/l **OECD 211** (Daphnia magna Reproduction Test) 12.1. Toxicity to algae: EC50 72h >10-100 ma/l Scenedesmus OECD 201 (Alga. subspicatus Growth Inhibition Test) EC50 72h OECD 201 (Alga, 12.1. Toxicity to algae: >1-10 Desmodesmus References mg/l subspicatus Growth Inhibition Test) OECD 301 A 12.2. Persistence and 28d >70 References % degradability: (Ready Biodegradability -DOC Die-Away Test) OEĆD 301 B 12.2. Persistence and 28d >60 References % degradability: (Ready Biodegradability -Co2 Evolution Test) 12.4. Mobility in soil: Koc >5000 Adsorption in ground. 12.4. Mobility in soil: Kow >5000 Adsorption in ground. EC50 140 Toxicity to bacteria: mg/l activated sludge ISO 10712 Toxicity to bacteria: EC50 >10000 mg/l Pseudomonas putida NOEC/NOEL **OECD 208** Other organisms: 10 mg/kg (Terrestrial Plants, Growth Test) Toxicity to annelids: LC50 14d >1000 mg/kg Eisenia foetida **OECD 207** (Earthworm, Acute Toxicity Tests)

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.

Implement substance recycling.

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.



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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	
14.1. UN number:	
	n.a.
Transport by road/by rail (ADR/RID)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
Classification code:	n.a.
LQ:	n.a.
14.5. Environmental hazards:	Not applicable
Tunnel restriction code:	
Transport by sea (IMDG-code)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
Marine Pollutant:	n.a
14.5. Environmental hazards:	Not applicable
Transport by air (IATA)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
14.5. Environmental hazards:	Not applicable
14.6. Special precautions for user	
Unless specified otherwise, general measures for safe transport	must be followed.
14.7 Transport in bulk according to Anney I	

14.7. 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

Observe restrictions:

Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): **REGULATION (EC) No 648/2004** less than 5 % anionic surfactants non-ionic surfactants NTA (nitrilotriacetic acid) and salts thereof

perfumes LIMONENE

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

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

< 0,5 %



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SECTION 16: Other information

Revised sections:

15

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 (EC) No. 1272/2008 (CLP)	Evaluation method used
Eye Irrit. 2, H319	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).

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H412 Harmful to aquatic life with long lasting effects.

Eye Irrit. — Eye irritation Carc. — Carcinogenicity Met. Corr. — Substance or mixture corrosive to metals Skin Irrit. — Skin irritation Eye Dam. — Serious eye damage Aquatic Chronic — Hazardous to the aquatic environment - chronic Acute Tox. — Acute toxicity - oral

Any abbreviations and acronyms used in this document:

AC **Article Categories** according, according to acc., acc. to ACGIH American Conference of Governmental Industrial Hygienists ADR 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 AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP) Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) 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 bw body weight **Chemical Abstracts Service** CAS 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



ആ Page 16 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 06.03.2019 / 0018 Replacing version dated / version: 14.09.2018 / 0017 Valid from: 06.03.2019 PDF print date: 06.03.2019 Universal-Reiniger 20 L Art.: 1655 CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) carcinogenic, mutagenic, reproductive toxic CMR COD Chemical oxygen demand CTFA Cosmetic, Toiletry, and Fragrance Association DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon DT50 Dwell Time - 50% reduction of start concentration Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes) DVS dw dry weight e.g. EC for example (abbreviation of Latin 'exempli gratia'), for instance European Community ECHA European Chemicals Agency European Economic Area FFA EEC European Economic Community EINECS European Inventory of Existing Commercial Chemical Substances ELINCS European List of Notified Chemical Substances ΕN **European Norms** United States Environmental Protection Agency (United States of America) FPA ERC **Environmental Release Categories** ES Exposure scenario et cetera etc. EU European Union EWC European Waste Catalogue Fax. Fax number gen. general Globally Harmonized System of Classification and Labelling of Chemicals GHS GWP Global warming potential HET-CAM Hen's Egg Test - Chorionallantoic Membrane 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 incl. including, inclusive IUCLID International Uniform ChemicaL Information Database lethal concentration LC 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 LQ Limited Quantities MARPOL International Convention for the Prevention of Marine Pollution from Ships not applicable n.a. not available n.av. not checked n.c. no data available n.d.a. NIOSH National Institute of Occupational Safety and Health (United States of America) NOAECNo 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 organic org. polycyclic aromatic hydrocarbon PAH



ആ Page 17 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 06.03.2019 / 0018 Replacing version dated / version: 14.09.2018 / 0017 Valid from: 06.03.2019 PDF print date: 06.03.2019 Universal-Reiniger 20 L Art.: 1655 PBT persistent, bioaccumulative and toxic PC Chemical product category ΡE 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. Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International RID Carriage of Dangerous Goods by Rail) SADT Self-Accelerating Decomposition Temperature Structure Activity Relationship SAR 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 Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria)) VbF 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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