

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 23-2-2017 Revision date: 12-7-2022 Supersedes version of: 30-6-2020 Version: 4.0

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

Product form	: Mixture
Product name	: Eco Reiniger
UFI	: 0HUN-GN50-X30V-4WTD
Product code	: 272380, 272381
Type of product	: Detergent
Product group	: Cleaning product
1.2. Relevant identified uses of the	substance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Professional use
Industrial/Professional use spec	: Wide dispersive use
Use of the substance/mixture	The information given in this MSDS concerns the product and is given on the assumption mentioned in section 1.1, that the product will be used in the manner and for the purpose indicated by the manufacturer.
Use of the substance/mixture	: Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners, air fresheners)
Function or use category	: Cleaning/washing agents and additives
I.2.2. Uses advised against	
No additional information available	

Distributor

JeFo Ship Supply De Dissel, 12 NL– 8332 JH Steenwijk Nederland T +31(0)683701219 info@jefoshipsupply.nl - www.jefoshipsupply.nl

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 2 Full text of H- and EUH-statements: see section 16 H319

Adverse physicochemical, human health and environmental effects

Causes serious eye irritation.

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2.2. Label elements	
Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	: GHS07
Signal word (CLP)	: Warning.
Hazard statements (CLP)	: H319 - Causes serious eye irritation.
Precautionary statements (CLP)	 P280 - Wear eye protection, protective gloves. P337+P313 - If eye irritation persists: Get medical advice/attention.
EUH-statements	: EUH210 - Safety data sheet available on request.
2.3. Other hazards	

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-Butoxyethanol substance with national workplace exposure limit(s) (IE, GB); substance with a Community workplace exposure limit	CAS-No.: 111-76-2 EC-No.: 203-905-0 EC Index-No.: 603-014-00-0 REACH-no: 01-2119475108- 36	5 – 10	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
C9-11 PARETH-6	CAS-No.: 68439-46-3 EC-No.: 931-514-1	1 – 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
Tetrapotassiumpyrophosphate	CAS-No.: 7320-34-5 EC-No.: 230-785-7 REACH-no: 01-2119489369- 18	1 – 5	Eye Irrit. 2, H319
Isotridecanol, ethoxylated (8 EO)	CAS-No.: 9043-30-5 EC-No.: 500-027-2 REACH-no: 02-2119552461- 55	1 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Potassium hydroxide substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136- 33	0,1 – 1	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
DIPHENYL ETHER substance with national workplace exposure limit(s) (IE, GB); substance with a Community workplace exposure limit	CAS-No.: 101-84-8 EC-No.: 202-981-2 REACH-no: 01-2119472545- 33	< 0,01	Eye Irrit. 2, H319 Aquatic Chronic 2, H411

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Isopentyl acetate substance with national workplace exposure limit(s) (IE); substance with a Community workplace exposure limit	CAS-No.: 123-92-2 EC-No.: 204-662-3 EC Index-No.: 607-130-00-2 REACH-no: 01-2119548408- 32	< 0,01	Flam. Liq. 3, H226
BHT substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 128-37-0 EC-No.: 204-881-4 REACH-no: 01-2119565113- 46	< 0,01	Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Citral substance with national workplace exposure limit(s) (IE)	CAS-No.: 5392-40-5 EC-No.: 226-394-6 EC Index-No.: 605-019-00-3 REACH-no: 01-2119462829- 23	< 0,01	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
Potassium hydroxide	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136- 33	(0,5 ≤C < 2) Eye Irrit. 2, H319 (0,5 ≤C < 2) Skin Irrit. 2, H315 (2 ≤C < 5) Skin Corr. 1B, H314 (5 ≤C < 100) Skin Corr. 1A, H314	
Full text of H- and ELIH-statements: see se	ction 16		

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

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact	 Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If you feel unwell, seek medical advice. 	
First-aid measures after ingestion 4.2. Most important symptoms and eff		
Symptoms/effects after eye contact	: Eye irritation.	
4.3. Indication of any immediate medical attention and special treatment needed		

Treat symptomatically.

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.		
5.2. Special hazards arising from the substance or mixture			
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide.		
5.3. Advice for firefighters			
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		

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SECTION 6: Accidental release measures				
6.1. Personal precautions, protectiv	e equipment and emergency procedures			
6.1.1. For non-emergency personnel				
Protective equipment Emergency procedures	Wear recommended personal protective equipment.Ventilate spillage area. Avoid contact with skin and eyes.			
6.1.2. For emergency responders				
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".			
6.2. Environmental precautions				
Avoid release to the environment.				
6.3. Methods and material for conta	inment and cleaning up			
Methods for cleaning up Other information	Take up liquid spill into absorbent material.Dispose of materials or solid residues at an authorized site.			

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and stor	age
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, in	ncluding any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.
Storage temperature	: 10 – 30 °C
Storage area	: Store in a clean, dry, fire resistant area. Ensure that there is a suitable ventilation system.
Special rules on packaging	: Store in a closed container. Keep only in original container.
7.2 Creatific and use(a)	

7.3. Specific end use(s)

Carefully comply with the instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Potassium hydroxide (1310-58-3)		
Ireland - Occupational Exposure Limits		
Local name Potassium hydroxide		
OEL STEL	2 mg/m³	
Regulatory reference Chemical Agents Code of Practice 2021		
United Kingdom - Occupational Exposure Limits		
Local name Potassium hydroxide		
WEL STEL (OEL STEL) 2 mg/m ³		

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Potassium hydroxide (1310-58-3)			
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE		
2-Butoxyethanol (111-76-2)			
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	2-Butoxyethanol		
IOEL TWA	98 mg/m³		
IOEL TWA [ppm]	20 ppm		
IOEL STEL	246 mg/m ³		
IOEL STEL [ppm]	50 ppm		
Remark	Skin		
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC		
Ireland - Occupational Exposure Limits			
Local name	2-Butoxyethanol (EGBE) [Ethylene glycol monobutyl ether]		
OEL TWA [1]	98 mg/m³		
OEL TWA [2]	20 ppm		
OEL STEL	246 mg/m ³		
OEL STEL [ppm]	50 ppm		
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)		
Regulatory reference	Chemical Agents Code of Practice 2021		
Ireland - Biological limit values			
Local name	2-Butoxyethanol		
BLV	200 mg/g creatinine Parameter: BAA - Medium: urine - Sampling time: End of shift		
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)		
United Kingdom - Occupational Exposure Limits			
Local name	2-Butoxyethanol		
WEL TWA (OEL TWA) [1]	123 mg/m ³		
WEL TWA (OEL TWA) [2]	25 ppm		
WEL STEL (OEL STEL)	246 mg/m ³		
WEL STEL (OEL STEL) [ppm]	50 ppm		
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity), BMGV (Biological monitoring guidance values are listed in Table 2)		
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE		
United Kingdom - Biological limit values	·		
Local name	2-Butoxyethanol		
BMGV	240 mmol/mol Creatinine Parameter: butoxyacetic acid - Medium: urine - Sampling time: Post shift		
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE		

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DIPHENYL ETHER (101-84-8)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Diphenyl ether	
IOEL TWA [ppm]	1 ppm	
IOEL STEL	14 mg/m ³	
IOEL STEL [ppm]	2 ppm	
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164	
Ireland - Occupational Exposure Limits		
Local name	Diphenyl ether (vapour)	
OEL TWA [1]	7 mg/m³	
OEL TWA [2]	1 ppm	
OEL STEL	14 mg/m ³	
OEL STEL [ppm]	2 ppm	
Remark	IOELV (Indicative Occupational Exposure Limit Values)	
Regulatory reference	Chemical Agents Code of Practice 2021	
United Kingdom - Occupational Exposure Limits	·	
Local name	Diphenyl ether	
WEL TWA (OEL TWA) [1]	7 mg/m³	
WEL TWA (OEL TWA) [2]	1 ppm	
WEL STEL (OEL STEL)	14 mg/m ³	
WEL STEL (OEL STEL) [ppm]	2 ppm	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
Isopentyl acetate (123-92-2)	·	
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name Isopentylacetate		
IOEL TWA	270 mg/m³	
IOEL TWA [ppm]	50 ppm	
IOEL STEL	540 mg/m ³	
IOEL STEL [ppm]	100 ppm	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
Ireland - Occupational Exposure Limits		
Local name	Isopentyl acetate [Isoamyl acetate]	
OEL TWA [1]	260 mg/m ³	
OEL TWA [2]	50 ppm	
OEL STEL	520 mg/m ³	
OEL STEL [ppm]	100 ppm	
Remark	IOELV (Indicative Occupational Exposure Limit Values)	
Regulatory reference	Chemical Agents Code of Practice 2021	

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BHT (128-37-0)		
Ireland - Occupational Exposure Limits		
Local name	2,6-Ditertiary-butyl-para-cresol [Butylated hydroxytoluene (BHT)]	
OEL TWA [1]	2 mg/m ³	
Regulatory reference	Chemical Agents Code of Practice 2021	
United Kingdom - Occupational Exposure Limits		
Local name	2,6-Di-tert-butyl-p-cresol	
WEL TWA (OEL TWA) [1]	10 mg/m ³	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
Citral (5392-40-5)		
Ireland - Occupational Exposure Limits		
Local name	Citral	
OEL TWA [2]	5 ppm IFV (Inhlable Fraction and Vapour)	
Regulatory reference	Chemical Agents Code of Practice 2021	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

C9-11 PARETH-6 (68439-46-3)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	2080 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	294 mg/m ³	
DNEL/DMEL (General population)		
Long-term - systemic effects,oral	25 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	87 mg/m ³	
Long-term - systemic effects, dermal	1250 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0,10379 mg/l	
PNEC aqua (marine water)	0,10379 mg/l	
PNEC aqua (intermittent, freshwater)	0,014 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	13,7 mg/kg dwt	
PNEC sediment (marine water)	13,7 mg/kg dwt	
PNEC (Soil)		
PNEC soil	1 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	1,4 mg/l	

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Tetrapotassiumpyrophosphate (7320-34-5)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, inhalation	44,08 mg/m ³	
DNEL/DMEL (General population)		
Long-term - systemic effects, inhalation 10,87 mg/m ³		
PNEC (Water)		
PNEC aqua (freshwater)	0,05 mg/l	
PNEC aqua (marine water)	0,005 mg/l	
PNEC aqua (intermittent, freshwater)	0,5 mg/l	
PNEC (STP)		
PNEC sewage treatment plant	50 mg/l	

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection			
Type Field of application Characteristics Standard			
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	2 (> 30 minutes)	0,4	2 (< 1.5)	EN 374-2

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Carefully comply with the instructions for use. Avoid release to the environment. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Consumer exposure controls:

Keep locked up and out of the reach of children. Appropriate personal protective equipment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Colour	: red.	
Appearance	: Clear.	
Odour	: perfumed.	
Odour threshold	: Not available	
Melting point	: Not applicable	
Freezing point	: Not available	
Boiling point	: Not available	
Flammability	: Not applicable	
Explosive limits	: Not available	
Lower explosion limit	: Not available	
Upper explosion limit	: Not available	
Flash point	: > 100 °C	
Auto-ignition temperature	: Not available	
Decomposition temperature	: Not available	
рН	: 13	
Viscosity, kinematic	: < 19,324 mm²/s	
Viscosity, dynamic	: < 20 mPa.s	
Solubility	: completely soluble.	
Partition coefficient n-octanol/water (Log Kow)	: Not available	
Vapour pressure	: Not available	
Vapour pressure at 50 °C	: Not available	
Density	: 1,035 g/cm ³	
Relative density	: Not available	
Relative vapour density at 20 °C	: Not available	
Particle characteristics	: Not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information	on	
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified 	
C9-11 PARETH-6 (68439-46-3)		
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
LC50 Inhalation - Rat	> 1,6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)	
Isotridecanol, ethoxylated (8 EO) (9043-3	0-5)	
LD50 oral	> 500 mg/kg bodyweight	
LD50 dermal	> 2000 mg/kg bodyweight	
Potassium hydroxide (1310-58-3)		
LD50 oral	333 mg/kg bodyweight	
2-Butoxyethanol (111-76-2)		
LD50 oral rat	1746 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1322 - 2301	
LD50 oral	1414 mg/kg bodyweight Animal: guinea pig, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1020 - 1961	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
LC50 Inhalation - Rat (Dust/Mist)	2200 mg/l	
Tetrapotassiumpyrophosphate (7320-34-	5)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:FMC Non-Definitive Dermal Toxicity Protocol (Number 7), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
LC50 Inhalation - Rat	> 1,1 mg/l air Animal: rat, Guideline: other:FMC Acute Inhalation Toxicity Protocol Number 27, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: other:US EPA Toxic Substances Health Effect Test Guidelines, October, 1984; (PB82-232984) Acute Inhalation Toxicity Study., Guideline: other:Commission of the European Communities, Council Directive 67/548/EEC, Annex V, Part B.2.; May 1, 1987, Guideline: other:US EPA Pesticide Assessment Guidelines: Subdivision F, Hazard Evaluation: Human and Domestic Animals, Nov, 1984; 81-3 Acute Inhalation Study	
Isopentyl acetate (123-92-2)		
LD50 oral	16600 mg/kg bodyweight	
LD50 dermal	> 5000 mg/kg bodyweight	

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BHT (128-37-0)	
LD50 oral rat	> 2930 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Citral (5392-40-5)	
LD50 oral rat	≈ 6800 mg/kg bodyweight Animal: rat
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat
Skin corrosion/irritation :	Not classified pH: 13
Serious eye damage/irritation :	Causes serious eye irritation. pH: 13
	Not classified
Germ cell mutagenicity :	Not classified
5 ,	Not classified
BHT (128-37-0)	
NOAEL (chronic, oral, animal/male, 2 years)	25 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: toxicity (migrated information)
Citral (5392-40-5)	
NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:Effect type: toxicity (migrated information)
Reproductive toxicity :	Not classified
STOT-single exposure :	Not classified
· ·	Not classified
C9-11 PARETH-6 (68439-46-3)	
NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity in Rodents)
2-Butoxyethanol (111-76-2)	
NOAEL (dermal, rat/rabbit, 90 days)	> 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
Tetrapotassiumpyrophosphate (7320-34-5)	
NOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity in Rodents)
DIPHENYL ETHER (101-84-8)	
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight
BHT (128-37-0)	
LOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Animal sex: male
NOAEL (oral, rat, 90 days)	25 mg/kg bodyweight Animal: rat, Animal sex: male
Citral (5392-40-5)	
LOAEC (inhalation, rat, gas, 90 days)	68 ppm Animal: rat, Animal sex: female
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEC (inhalation, rat, gas, 90 days)	34 ppm Animal: rat, Animal sex: female

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Citral (5392-40-5)		
IOAEL (subchronic, oral, animal/male, 90 days) 60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Gu (Combined Chronic Toxicity / Carcinogenicity Studies)		
Aspiration hazard	: Not classified	
Eco Reiniger		
Viscosity, kinematic	< 19,324 mm²/s	
2-Butoxyethanol (111-76-2)		
Viscosity, kinematic	3,7 mm ² /s	
BHT (128-37-0)		
Viscosity, kinematic	3,47 mm²/s	

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term : (acute)	Not classified
Hazardous to the aquatic environment, long-term : (chronic)	Not classified
C9-11 PARETH-6 (68439-46-3)	
LC50 - Fish [1]	5 – 7 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2,5 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	1,4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Potassium hydroxide (1310-58-3)	
LC50 - Fish [1]	80 mg/l
2-Butoxyethanol (111-76-2)	
LC50 - Fish [1]	1474 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	≈ 1800 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	911 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	1840 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '21 d'
Tetrapotassiumpyrophosphate (7320-34-5)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)

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Tetrapotassiumpyrophosphate (7320-34-5)		
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	 > 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) 	
DIPHENYL ETHER (101-84-8)		
LC50 - Fish [1]	4,2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	1,96 mg/l Test organisms (species): Daphnia magna	
Isopentyl acetate (123-92-2)		
LC50 - Fish [1]	> 22 mg/l	
EC50 - Other aquatic organisms [1]	42 mg/l waterflea	
EC50 - Other aquatic organisms [2]	> 100 mg/l	
BHT (128-37-0)		
LC50 - Fish [1]	0,57 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	0,48 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	 > 0,4 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) 	
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	0,023 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	0,053 mg/l Test organisms (species): Oryzias latipes Duration: '42 d'	
Citral (5392-40-5)		
LC50 - Fish [1]	6,78 mg/l Test organisms (species): Leuciscus idus	
EC50 - Crustacea [1]	6,8 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	103,8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	

12.2. Persistence and degradability

Eco Reiniger	
Persistence and degradability	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.

12.3. Bioaccumulative potential		
Potassium hydroxide (1310-58-3)		
Partition coefficient n-octanol/water (Log Pow) 0,75		
2-Butoxyethanol (111-76-2)		
Partition coefficient n-octanol/water (Log Pow) 0,81		
Tetrapotassiumpyrophosphate (7320-34-5)		
Partition coefficient n-octanol/water (Log Pow) -10,45		

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Isopentyl acetate (123-92-2)		
Partition coefficient n-octanol/water (Log Pow) 2,7		
BHT (128-37-0)		
Partition coefficient n-octanol/water (Log Pow) 5,1		
Citral (5392-40-5)		
Partition coefficient n-octanol/water (Log Pow) 2,8		
12.4. Mobility in soil		

No additional information available

12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		

No additional information available

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Regional legislation (waste) Waste treatment methods Product/Packaging disposal recommendations	 Disposal must be done according to official regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations. Empty containers can be dumped after cleaning according to local legislation. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.
Ecology - waste materials European List of Waste (LoW) code	 Avoid release to the environment. 20 01 29* - detergents containing dangerous substances

SECTION 14: Transport information

ADR	IMDG	ΙΑΤΑ	ADN	RID
4.1. UN number or ID I	number	· · ·		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippir	ng name		,	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard	class(es)	· · · ·		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			,	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental ha	zards			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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14.6. Special precautions for user

Overland transport Not applicable

Transport by sea Not applicable

Air transport Not applicable

Inland waterway transport Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Detergent Regulation (648/2004)

Labelling of contents		
Component %		
non-ionic surfactants, anionic surfactants, phosphates <5%		
perfumes		

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

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15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Modified	
	Revision date	Modified	
	Flammability (solid, gas)	Added	
1.1	Product code	Modified	
1.1	Name	Added	
6.1	Protective equipment	Added	
6.3	Methods for cleaning up	Added	
9.1	Appearance	Added	
9.1	Melting point	Added	

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	

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Abbreviations and acronyms:		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
STP	Sewage treatment plant	
TLM	Median Tolerance Limit	
SDS	Safety Data Sheet	
vPvB	Very Persistent and Very Bioaccumulative	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
EC-No.	European Community number	
EN	European Standard	
OEL	Occupational Exposure Limit	
ThOD	Theoretical oxygen demand (ThOD)	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
ED	Endocrine disrupting properties	

Data sources

Other information

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

: None. DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

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Full text of H- and EUH-statements:	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B

 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

 Eye Irrit. 2
 H319
 Concentration limits

The classification complies with

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: ATP 12
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Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.