



# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 23-2-2017 Revision date: 20-6-2024 Supersedes version of: 12-7-2022 Version: 4.1

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Eco Reiniger  
UFI : 2YA0-SJ70-H602-D64H  
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

##### 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 purposes indicated by the manufacturer.  
Use of the substance/mixture : Cleaner

#### 1.3. Details of the supplier of the safety data sheet

##### Distributor

JeFo Ship Supply  
Roomweg 6-B  
NL 8334 NR Tuk  
Nederland  
T +31(0)683701219  
[info@jefoshipsupply.nl](mailto:info@jefoshipsupply.nl), [www.jefoshipsupply.nl](http://www.jefoshipsupply.nl)

#### 1.4. Emergency telephone number

Country/Area	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	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 1 H318  
Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Causes serious eye irritation.

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger.

Contains :

C9-11 PARETH-6; Isotridecanol, ethoxylated (8 EO)

Hazard statements (CLP) :

H318 - Causes serious eye damage.

Precautionary statements (CLP) :

P280 - Wear eye protection, protective gloves.

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.

EUH-statements :

EUH210 - Safety data sheet available on request.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  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 substance(s) are 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

### 3.2. 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. 3 (Inhalation), H331 Acute Tox. 4 (Oral), H302 (ATE=1200 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Irrit. 2, H319
C9-11 PARETH-6	CAS-No.: 68439-46-3 REACH-no: Polymer	1 – 5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Dam. 1, H318
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: Polymer	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 (ATE=333 mg/kg bodyweight) 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 EUH210

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 EUH066
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	STOT RE Not classified 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 EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: If you feel unwell, seek medical advice.

### 4.2. Most important symptoms and effects, both acute and delayed

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.
--------------------------------	--

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

##### 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 containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : 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 storage

#### 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, including 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.

#### 7.3. Specific end use(s)

Carefully comply with the instructions for use.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### National occupational exposure and biological limit values

potassium hydroxide (1310-58-3)	
Ireland - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL STEL	2 mg/m <sup>3</sup>
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
United Kingdom - Occupational Exposure Limits	
Local name	Potassium hydroxide

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>potassium hydroxide (1310-58-3)</b>	
WEL STEL (OEL STEL)	2 mg/m <sup>3</sup>
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>2-Butoxyethanol (111-76-2)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	2-Butoxyethanol
IOEL TWA	98 mg/m <sup>3</sup>
	20 ppm
IOEL STEL	246 mg/m <sup>3</sup>
	50 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>Ireland - Occupational Exposure Limits</b>	
Local name	2-Butoxyethanol (EGBE) [Ethylene glycol monobutyl ether]
OEL TWA	98 mg/m <sup>3</sup>
	20 ppm
OEL STEL	246 mg/m <sup>3</sup>
	50 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values), Skin (Substances which have the capacity to penetrate intact skin when they come in contact with it and be absorbed into the body. A substantial contribution to the total body burden via dermal exposure is possible)
Regulatory reference	Chemical Agents Code of Practice 2024
<b>Ireland - Biological limit values</b>	
Local name	2-Butoxyethanol
BMGV	200 mg/g creatinine Parameter: BAA - Medium: urine - Sampling time: End of shift
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	2-Butoxyethanol
WEL TWA (OEL TWA)	123 mg/m <sup>3</sup>
	25 ppm
WEL STEL (OEL STEL)	246 mg/m <sup>3</sup>
	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
<b>United Kingdom - Biological limit values</b>	
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

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>DIPHENYL ETHER (101-84-8)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Diphenyl ether
IOEL TWA	7 mg/m <sup>3</sup>
	1 ppm
IOEL STEL	14 mg/m <sup>3</sup>
	2 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Diphenyl ether (vapour)
OEL TWA	7 mg/m <sup>3</sup>
	1 ppm
OEL STEL	14 mg/m <sup>3</sup>
	2 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Diphenyl ether
WEL TWA (OEL TWA)	7 mg/m <sup>3</sup>
	1 ppm
WEL STEL (OEL STEL)	14 mg/m <sup>3</sup>
	2 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>isopentyl acetate (123-92-2)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Isopentylacetate
IOEL TWA	270 mg/m <sup>3</sup>
	50 ppm
IOEL STEL	540 mg/m <sup>3</sup>
	100 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Isopentyl acetate [Isoamyl acetate]
OEL TWA	260 mg/m <sup>3</sup>
	50 ppm
OEL STEL	520 mg/m <sup>3</sup>
	100 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>BHT (128-37-0)</b>	
<b>Ireland - Occupational Exposure Limits</b>	
Local name	2,6-Ditertiary-butyl-para-cresol [Butylated hydroxytoluene (BHT)]
OEL TWA	2 mg/m <sup>3</sup>
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	2,6-Di-tert-butyl-p-cresol
WEL TWA (OEL TWA)	10 mg/m <sup>3</sup>
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>citral (5392-40-5)</b>	
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Citral
OEL TWA	5 ppm IFV (Inhlabl Fraction and Vapour)
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
<b>DNEL and PNEC</b>	
<b>C9-11 PARETH-6 (68439-46-3)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	2080 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	294 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	87 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	1250 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0,10379 mg/l
PNEC aqua (marine water)	0,10379 mg/l
PNEC aqua (intermittent, freshwater)	0,014 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	13,7 mg/kg dwt
PNEC sediment (marine water)	13,7 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	1 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	1,4 mg/l
<b>Tetrapotassiumpyrophosphate (7320-34-5)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, inhalation	44,08 mg/m <sup>3</sup>

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

### 8.2. Exposure controls

#### Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protection equipment

##### Personal protective equipment symbol(s):



#### Eye and face protection

##### Eye protection:

Wear security glasses which protect from splashes (EN ISO16321 CH)

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses	Protection for Liquid particles	With side shields	EN ISO 16321 CH

#### Skin protection

##### Skin and body protection:

If there is a risk of liquid being splashed : Long sleeved protective clothing (EN 14605)

Skin and body protection	
Type	Standard
Tyvek® Gown/Coveralls	EN 14605

##### Hand protection:

Protective gloves

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

#### Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment



# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 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
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 100 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 13
pH solution concentration	: 100 %
Viscosity, kinematic	: < 19,324 mm <sup>2</sup> /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 <sup>3</sup>
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

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.

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

No additional information available

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

#### 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) (9043-30-5)

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

#### 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)

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>citral (5392-40-5)</b>	
LD50 oral rat	≈ 6800 mg/kg bodyweight Animal: rat
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 13
Serious eye damage/irritation	: Causes serious eye damage. pH: 13
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
<b>BHT (128-37-0)</b>	
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)
<b>citral (5392-40-5)</b>	
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 (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
<b>C9-11 PARETH-6 (68439-46-3)</b>	
NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
<b>2-Butoxyethanol (111-76-2)</b>	
NOAEL (dermal, rat/rabbit, 90 days)	> 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
<b>Tetrapotassiumpyrophosphate (7320-34-5)</b>	
NOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
<b>DIPHENYL ETHER (101-84-8)</b>	
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight
<b>BHT (128-37-0)</b>	
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
<b>citral (5392-40-5)</b>	
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
NOAEL (subchronic, oral, animal/male, 90 days)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
<b>Eco Reiniger</b>	
Viscosity, kinematic	< 19,324 mm <sup>2</sup> /s

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 2-Butoxyethanol (111-76-2)

Viscosity, kinematic	3,7 mm <sup>2</sup> /s
----------------------	------------------------

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : 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 (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic) : Not classified (Based on available data, the classification criteria are not met)

### 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)
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

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>isopentyl acetate (123-92-2)</b>	
LC50 - Fish [1]	> 22 mg/l
EC50 - Other aquatic organisms [1]	42 mg/l waterflea
EC50 - Other aquatic organisms [2]	> 100 mg/l
<b>BHT (128-37-0)</b>	
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'
<b>citral (5392-40-5)</b>	
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)
<b>12.2. Persistence and degradability</b>	
<b>Eco Reiniger</b>	
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.
<b>C9-11 PARETH-6 (68439-46-3)</b>	
Persistence and degradability	Rapidly degradable
<b>Isotridecanol, ethoxylated (8 EO) (9043-30-5)</b>	
Persistence and degradability	Rapidly degradable
<b>potassium hydroxide (1310-58-3)</b>	
Persistence and degradability	Rapidly degradable
<b>2-Butoxyethanol (111-76-2)</b>	
Persistence and degradability	Rapidly degradable
<b>Tetrapotassiumpyrophosphate (7320-34-5)</b>	
Persistence and degradability	Rapidly degradable
<b>DIPHENYL ETHER (101-84-8)</b>	
Persistence and degradability	Rapidly degradable
<b>isopentyl acetate (123-92-2)</b>	
Persistence and degradability	Rapidly degradable
<b>BHT (128-37-0)</b>	
Persistence and degradability	Rapidly degradable

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### citral (5392-40-5)

Persistence and degradability	Rapidly degradable
-------------------------------	--------------------

### 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
---	--------

#### 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 waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: 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.
Ecological waste information	: Avoid release to the environment.
European List of Waste (LoW, EC 2000/532)	: 20 01 29* - detergents containing dangerous substances
HP Code	: HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

### 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

#### EU-Regulations

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

### Detergent Regulation (648/2004)

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

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 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 the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes		
Section	Changed item	Comments
	Supersedes	<b>Modified</b>
	Revision date	<b>Modified</b>
1.1	UFI on SDS 1.1	<b>Added</b>
1.2	Use of the substance/mixture	<b>Modified</b>
1.2	Function or use category	<b>Removed</b>
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	<b>Modified</b>
2.2	Signal word (CLP)	<b>Modified</b>
2.2	Hazard pictograms (CLP)	<b>Modified</b>
2.2	Precautionary statements (CLP)	<b>Modified</b>
2.2	Hazard statements (CLP)	<b>Modified</b>
5.2	Hazardous decomposition products in case of fire	<b>Added</b>
8.2	Eye protection	<b>Modified</b>
8.2	Skin and body protection	<b>Modified</b>
9	Concentration of the solution used for the pH measurement	<b>Added</b>

### 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



# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
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
IATA	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
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
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 disruptor

Data sources

: 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.

# Eco Reiniger

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Other information

: 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. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
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
EUH066	Repeated exposure may cause skin dryness or cracking.
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.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic 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
STOT RE Not classified	Specific target organ toxicity (repeated exposure) Not classified

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

Eye Dam. 1	H318	Concentration limits
------------	------	----------------------

The classification complies with

: ATP 12

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.