

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

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

- **1.1 Product identifier**
- **Trade name:** MAFRASOL 2.0
- **UFI:** 5TY5-708E-Y00K-4FYD
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Life cycle stages** PW Widespread use by professional workers
- **Sector of Use** SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Product category** PC35 Washing and cleaning products (including solvent based products)
- **Application of the substance / the mixture** Exterior vehicle cleaner
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
MA-FRA S.p.A. a Socio Unico  
Via Aquileia, 44/46  
20021 Baranzate (MI) ITALIA  
Tel. +39 023569981  
[www.mafra.com](http://www.mafra.com)  
[mafra@mafra.it](mailto:mafra@mafra.it)
- **Informing department:** [info@mafra.it](mailto:info@mafra.it)
- **1.4 Emergency telephone number:** In case of accident call the emergency number 112

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Skin Corr. 1A H314 Causes severe skin burns and eye damage.  
Eye Dam. 1 H318 Causes serious eye damage.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
sodium hydroxide  
Ethoxy Alcohol C9-C11  
potassium hydroxide
- **Hazard statements**  
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**  
P102 Keep out of reach of children.  
P280 Wear protective gloves / eye protection / face protection.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

**Trade name: MAFRASOL 2.0**

(Contd. of page 1)

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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

P332+P313 If skin irritation occurs: Get medical advice/attention.

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulation

**- 2.3 Other hazards****- Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

**- 3.2 Mixtures**

- **Description:** Mixture of substances

**- Dangerous components:**

CAS: 1310-73-2 EINECS: 215-185-5 Reg.nr.: 01-2119457892-27	sodium hydroxide ☞ Met. Corr. 1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0.5 % ≤ C < 2 % Eye Irrit. 2; H319: 0.5 % ≤ C < 2 %	3-5%
CAS: 78330-20-8 EC number: 616-607-4	Ethoxy Alcohol C9-C11 ☞ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	1-<3%
CAS: 51981-21-6 EINECS: 257-573-7 Reg.nr.: 01-2119493601-38	glutamic acid, N,N-diacetic acid, tetrasodium salt ☞ Met. Corr. 1, H290	1-<3%
CAS: 111-76-2 EINECS: 203-905-0 Reg.nr.: 01-2119475108-36	2-butoxyethanol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE: LD50 oral: 1,200 mg/Kg	1-<3%
CAS: 2809-21-4 EINECS: 220-552-8 Reg.nr.: 01-2119510391-53	1-hydroxy ethylidene-1,1diphosphonic acid ☞ Met. Corr. 1, H290; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	1-<3%
CAS: 1310-58-3 EINECS: 215-181-3 Reg.nr.: 01-2119487136-33	potassium hydroxide ☞ Met. Corr. 1, H290; Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0.5 % ≤ C < 2 % Eye Irrit. 2; H319: 0.5 % ≤ C < 2 %	1-<3%

**- Regulation (EC) No 648/2004**

non-ionic surfactants, polycarboxylates, phosphonates, anionic surfactants, perfumes

&lt;5%

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

### SECTION 4: First aid measures

**- 4.1 Description of first aid measures****- General information**

Instantly remove any clothing soiled by the product.

No special measures required.

**- After inhalation**

In case of unconsciousness bring patient into stable side position for transport.

Supply fresh air; consult doctor in case of symptoms.

(Contd. on page 3)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

**Trade name: MAFRASOL 2.0**

(Contd. of page 2)

- **After skin contact**  
Instantly wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact**  
Rinse opened eye for several minutes under running water. Then consult doctor.  
Use eye protection.
- **After swallowing**  
Do not induce vomiting; instantly call for medical help.  
Drink copious amounts of water and provide fresh air. Instantly call for doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
Sickness  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
If swallowed, gastric irrigation  
Medical supervision for at least 48 hours

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.  
Use fire fighting measures that suit the environment.
- **5.2 Special hazards arising from the substance or mixture**  
Can be released in case of fire  
Carbon monoxide (CO)
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
Protection means for respiratory tract
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Protective gloves. (EN 374)  
Particular danger of slipping on leaked/spilled product.  
Keep away unauthorized persons  
Product forms slippery surface when combined with water.
- **For non-emergency personnel**  
Ensure adequate ventilation  
Keep away from ignition sources  
Wear protective clothing.
- **For emergency responders**  
Nitrile rubber, NBR  
Recommended thickness of the material:  $\geq 0.1$  mm
- **6.2 Environmental precautions:**  
Inform respective authorities in case product reaches water or sewage system.  
Dilute with much water.  
Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralising agent.  
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.

(Contd. on page 4)

GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

**Trade name: MAFRASOL 2.0**

(Contd. of page 3)

See Section 13 for information on disposal.

**SECTION 7: Handling and storage****- 7.1 Precautions for safe handling**

Take off immediately all contaminated clothing  
Wash hands during breaks and at the end of the work.  
Do not eat, drink or smoke while working.

**- Information about protection against explosions and fires:** Protect from heat.**- 7.2 Conditions for safe storage, including any incompatibilities****- Storage**

**- Requirements to be met by storerooms and containers:** Store only in the original container.  
**- Information about storage in one common storage facility:** Do not store together with acids.  
**- Further information about storage conditions:** Keep container tightly sealed.  
**- Class according to regulation on inflammable liquids:** Void  
**- 7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection****- 8.1 Control parameters****- Components with limit values that require monitoring at the workplace:****1310-58-3 potassium hydroxide**WEL Short-term value: 2 mg/m<sup>3</sup>**111-76-2 2-butoxyethanol**

WEL Short-term value: 246 mg/m<sup>3</sup>, 50 ppm  
Long-term value: 123 mg/m<sup>3</sup>, 25 ppm  
Sk, BMGV

**7664-38-2 phosphoric acid**

WEL Short-term value: 2 mg/m<sup>3</sup>  
Long-term value: 1 mg/m<sup>3</sup>

**- DNELs****1310-73-2 sodium hydroxide**

Inhalative	Local long-term effects	1 mg/m <sup>3</sup> (Industrial Workers)
		1 mg/m <sup>3</sup> (Consumers)
	Local short-term effects	1 mg/m <sup>3</sup> (Industrial Workers)
		1 mg/m <sup>3</sup> (Consumers)

**51981-21-6 glutamic acid, N,N-diacetic acid, tetrasodium salt**

Oral	Systemic Long-term Effects	1.5 mg/Kg bw/day (Consumers)
Dermal	Systemic long-term effects	15,000 mg/Kg bw/day (Industrial Workers)
		7,500 mg/Kg bw/day (Consumers)
Inhalative	Systemic long-term effects	7.3 mg/m <sup>3</sup> (Industrial Workers)
		1.8 mg/m <sup>3</sup> (Consumers)

**111-76-2 2-butoxyethanol**

Oral	Systemic Long-term Effects	6.3 mg/Kg bw/day (Consumers)
	Systemic short-term effects	26.7 mg/m <sup>3</sup> (Consumers)
Dermal	Systemic long-term effects	125 mg/Kg bw/day (Industrial Workers)
		75 mg/Kg bw/day (Consumers)
	Systemic Short-term Effects	89 mg/Kg bw/day (Industrial Workers)
		89 mg/Kg bw/day (Consumers)

(Contd. on page 5)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

**Trade name: MAFRASOL 2.0**

(Contd. of page 4)

<i>Inhalative</i>	<i>Local long-term effects</i>	67.5 mg/m <sup>3</sup> ( <i>Industrial Workers</i> ) 40.5 mg/m <sup>3</sup> ( <i>Consumers</i> )
	<i>Local short-term effects</i>	246 mg/m <sup>3</sup> ( <i>Industrial Workers</i> ) 147 mg/m <sup>3</sup> ( <i>Consumers</i> )
	<i>Systemic long-term effects</i>	98 mg/m <sup>3</sup> ( <i>Industrial Workers</i> ) 59 mg/m <sup>3</sup> ( <i>Consumers</i> )
	<i>Systemic Short-term Effects</i>	1,091 mg/m <sup>3</sup> ( <i>Industrial Workers</i> ) 426 mg/m <sup>3</sup> ( <i>Consumers</i> )

**2809-21-4 1-hydroxy ethylidene-1,1diphosphonic acid**

<i>Oral</i>	<i>Systemic Long-term Effects</i>	13 mg/Kg bw/day ( <i>Consumers</i> )
	<i>Systemic short-term effects</i>	13 mg/m <sup>3</sup> ( <i>Industrial Workers</i> ) 6.5 mg/m <sup>3</sup> ( <i>Consumers</i> )
<i>Dermal</i>	<i>Systemic long-term effects</i>	13 mg/Kg bw/day ( <i>Industrial Workers</i> )

**85536-14-7 Dodecylbenzene sulphonic acid**

<i>Oral</i>	<i>Systemic Long-term Effects</i>	0.425 mg/Kg bw/day ( <i>Consumers</i> )
<i>Dermal</i>	<i>Systemic long-term effects</i>	85 mg/Kg bw/day ( <i>Industrial Workers</i> ) 42.5 mg/Kg bw/day ( <i>Consumers</i> )
<i>Inhalative</i>	<i>Local long-term effects</i>	12 mg/m <sup>3</sup> ( <i>Industrial Workers</i> ) 3 mg/m <sup>3</sup> ( <i>Consumers</i> )
	<i>Systemic long-term effects</i>	6 mg/m <sup>3</sup> ( <i>Industrial Workers</i> ) 1.5 mg/m <sup>3</sup> ( <i>Consumers</i> )

**1310-58-3 potassium hydroxide**

<i>Inhalative</i>	<i>Local long-term effects</i>	1 mg/m <sup>3</sup> ( <i>Industrial Workers</i> ) 1 mg/m <sup>3</sup> ( <i>Consumers</i> )
	<i>Systemic long-term effects</i>	1 mg/m <sup>3</sup> ( <i>Industrial Workers</i> ) 1 mg/m <sup>3</sup> ( <i>Consumers</i> )

**- PNECs****51981-21-6 glutamic acid, N,N-diacetic acid, tetrasodium salt**

<i>PNEC STP</i>	41.2 mg/L ( <i>STP</i> )
<i>Soil</i>	0.5 mg/Kg ( <i>Soil</i> )
<i>Soft Water</i>	9.45 mg/L ( <i>Water</i> )
<i>Sea water</i>	0.945 mg/L ( <i>Water</i> )

**111-76-2 2-butoxyethanol**

<i>PNEC STP</i>	463 mg/L ( <i>STP</i> )
<i>Soil</i>	2.33 mg/Kg ( <i>Soil</i> )
<i>Soft Water</i>	8.8 mg/L ( <i>Water</i> )
<i>Sea water</i>	0.88 mg/L ( <i>Water</i> )
<i>Sediment (soft water)</i>	34.6 mg/Kg ( <i>Soil</i> )
<i>Sediment (sea water)</i>	3.46 mg/Kg ( <i>Soil</i> )
<i>Occasional Emission</i>	26.4 mg/L ( <i>Water</i> )

**2809-21-4 1-hydroxy ethylidene-1,1diphosphonic acid**

<i>PNEC STP</i>	20 mg/L ( <i>STP</i> )
<i>Soil</i>	96 mg/Kg ( <i>Soil</i> )
<i>Soft Water</i>	0.136 mg/L ( <i>Water</i> )
<i>Sea water</i>	0.0136 mg/L ( <i>Water</i> )
<i>Sediment (soft water)</i>	59 mg/Kg ( <i>Soil</i> )

(Contd. on page 6)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

**Trade name: MAFRASOL 2.0**

(Contd. of page 5)

<i>Sediment (sea water)</i>	5.9 mg/Kg (Soil)
<b>85536-14-7 Dodecylbenzene sulphonic acid</b>	
<i>PNEC STP</i>	3.43 mg/L (STP)
<i>Soil</i>	35 mg/Kg (Soil)
<i>Soft Water</i>	0.268 mg/L (Water)
<i>Sea water</i>	0.027 mg/L (Water)
<i>Sediment (soft water)</i>	8.1 mg/Kg (Soil)
<i>Sediment (sea water)</i>	6.8 mg/Kg (Soil)

**- Ingredients with biological limit values:****111-76-2 2-butoxyethanol**

BMGV 240 mmol/mol creatinine  
Medium: urine  
Sampling time: post shift  
Parameter: butoxyacetic acid

- **Additional information:** The lists that were valid during the compilation were used as basis.

**- 8.2 Exposure controls**

- **Appropriate engineering controls** No further data; see item 7.  
- **Individual protection measures, such as personal protective equipment**

**- General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.  
Take off immediately all contaminated clothing  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.

- **Breathing equipment:** Not required.

**- Hand protection**

Protective gloves. (EN 374)

**Alkaline resistant gloves**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**- Material of gloves**

Nitrile rubber, NBR  
Recommended thickness of the material:  $\geq 0.1$  mm

**- Penetration time of glove material**

For the mixture of chemicals mentioned below the penetration time has to be at least 15 minutes (Permeation according to EN 16523-1:2015: Level 1).

**- Eye/face protection**

Tightly sealed safety glasses.

- **Body protection:** Alkaline resistant protective clothing

- **Environmental exposure controls** Disposal must be made according to official regulations.

## SECTION 9: Physical and chemical properties

**- 9.1 Information on basic physical and chemical properties****- General Information**

- **Physical state** Fluid  
- **Colour:** Red

(Contd. on page 7)

GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

Trade name: MAFRASOL 2.0

(Contd. of page 6)

- <b>Odour:</b>	<i>Pleasant</i>
- <b>Odour threshold:</b>	<i>Not determined.</i>
- <b>Melting point/freezing point:</b>	<i>Not determined</i>
- <b>Boiling point or initial boiling point and boiling range</b>	<i>100 °C (7732-18-5 water, distilled, conductivity or of similar purity)</i>
- <b>Flammability</b>	<i>Not applicable.</i>
- <b>Lower and upper explosion limit</b>	
- <b>Lower:</b>	<i>Not determined.</i>
- <b>Upper:</b>	<i>Not determined.</i>
- <b>Flash point:</b>	<i>Not applicable</i>
- <b>Self-inflammability:</b>	<i>Product is not selfigniting.</i>
- <b>Decomposition temperature:</b>	<i>Not determined.</i>
- <b>pH at 20 °C</b>	<i>&gt;12</i>
- <b>Viscosity:</b>	
- <b>Kinematic viscosity</b>	<i>Not determined.</i>
- <b>dynamic:</b>	<i>Not determined.</i>
- <b>Solubility</b>	
- <b>Water:</b>	<i>Fully miscible</i>
- <b>Partition coefficient n-octanol/water (log value)</b>	<i>Not determined.</i>
- <b>Vapour pressure:</b>	<i>Not determined.</i>
- <b>Density and/or relative density</b>	
- <b>Density at 20 °C</b>	<i>1.1 g/cm<sup>3</sup></i>
- <b>Relative density</b>	<i>Not determined.</i>
- <b>Vapour density</b>	<i>Not determined.</i>

**- 9.2 Other information**

- <b>Appearance:</b>	
- <b>Form:</b>	<i>Fluid</i>
- <b>Important information on protection of health and environment, and on safety.</b>	
- <b>Explosive properties:</b>	<i>Product is not explosive.</i>
- <b>Change in condition</b>	
- <b>Evaporation rate</b>	<i>Not determined.</i>

**- Information with regard to physical hazard classes**

- <b>Explosives</b>	<i>Void</i>
- <b>Flammable gases</b>	<i>Void</i>
- <b>Aerosols</b>	<i>Void</i>
- <b>Oxidising gases</b>	<i>Void</i>
- <b>Gases under pressure</b>	<i>Void</i>
- <b>Flammable liquids</b>	<i>Void</i>
- <b>Flammable solids</b>	<i>Void</i>
- <b>Self-reactive substances and mixtures</b>	<i>Void</i>
- <b>Pyrophoric liquids</b>	<i>Void</i>
- <b>Pyrophoric solids</b>	<i>Void</i>
- <b>Self-heating substances and mixtures</b>	<i>Void</i>
- <b>Substances and mixtures, which emit flammable gases in contact with water</b>	<i>Void</i>
- <b>Oxidising liquids</b>	<i>Void</i>
- <b>Oxidising solids</b>	<i>Void</i>
- <b>Organic peroxides</b>	<i>Void</i>
- <b>Corrosive to metals</b>	<i>Void</i>
- <b>Desensitised explosives</b>	<i>Void</i>

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** *Stable under normal conditions*

(Contd. on page 8)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

**Trade name: MAFRASOL 2.0**

(Contd. of page 7)

- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with acids
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Reacts with strong acids
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

### SECTION 11: Toxicological information

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

##### - Acute toxicity

##### - LD/LC50 values that are relevant for classification:

###### 1310-73-2 sodium hydroxide

Oral	LD50	2,000 mg/Kg (Rat)
------	------	-------------------

###### 78330-20-8 Ethoxy Alcohol C9-C11

Oral	LD50	300-2,000 mg/Kg (Rat)
------	------	-----------------------

###### 51981-21-6 glutamic acid, N,N-diacetic acid, tetrasodium salt

Oral	LD50	>2,000 mg/Kg (Rat)
------	------	--------------------

Dermal	LD50	>2,000 mg/Kg (Rat)
--------	------	--------------------

###### 111-76-2 2-butoxyethanol

Oral	LD50	1,200 mg/Kg (ATE)
------	------	-------------------

>2,000 mg/Kg (Rabbit)
-----------------------

1,746 mg/Kg (Rat)
-------------------

Dermal	LD50	>2,000 mg/Kg (Rat)
--------	------	--------------------

###### 85536-14-7 Dodecylbenzene sulphonic acid

Oral	LD50	1,350 mg/Kg (Rat)
------	------	-------------------

Dermal	LD50	>2,000 mg/Kg (Rat)
--------	------	--------------------

- **Skin corrosion/irritation** Causes severe skin burns and eye damage.

- **Serious eye damage/irritation** Causes serious eye damage.

#### - 11.2 Information on other hazards

##### - Endocrine disrupting properties

None of the ingredients is listed.

### SECTION 12: Ecological information

#### - 12.1 Toxicity

##### - Aquatic toxicity:

###### 1310-73-2 sodium hydroxide

LC50 (96h)	45 mg/L (Fish)
------------	----------------

EC50 (48h)	40.4 mg/L (Daphnia)
------------	---------------------

LC50 (48h)	189 mg/L (Fish)
------------	-----------------

###### 78330-20-8 Ethoxy Alcohol C9-C11

LC50 (96h)	>100 mg/L (Fish)
------------	------------------

EC50 (48h)	>100 mg/L (Daphnia)
------------	---------------------

EC50 (72h)	>100 mg/L (Algae)
------------	-------------------

###### 51981-21-6 glutamic acid, N,N-diacetic acid, tetrasodium salt

LC50 (96h)	>100 mg/L (Fish)
------------	------------------

EC50 (48h)	>100 mg/L (Daphnia)
------------	---------------------

(Contd. on page 9)



**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

**Trade name: MAFRASOL 2.0**

(Contd. of page 8)

**111-76-2 2-butoxyethanol**

LC50 (96h) 1,474 mg/L (Fish)

EC50 (48h) 1,550 mg/L (Daphnia)

EC50 (72h) 911 mg/L (Algae)

**2809-21-4 1-hydroxy ethylidene-1,1diphosphonic acid**

LC50 (96h) 195 mg/L (Fish)

EC50 (48h) 527 mg/L (Daphnia)

EC50 (96h) 7.2 mg/L (Algae)

**85536-14-7 Dodecylbenzene sulphonic acid**

LC50 (96h) 1-10 mg/L (Fish)

EC50 (48h) 1-10 mg/L (Daphnia)

**1310-58-3 potassium hydroxide**

LC50 (96h) 80 mg/L (Fish)

- **12.2 Persistence and degradability** The contained surfactants are easily biodegradable- **12.3 Bioaccumulative potential** No further relevant information available.- **12.4 Mobility in soil** No further relevant information available.- **12.5 Results of PBT and vPvB assessment**- **PBT:** Not applicable.- **vPvB:** Not applicable.- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.- **12.7 Other adverse effects**- **Additional ecological information:**- **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

**SECTION 13: Disposal considerations**- **13.1 Waste treatment methods**- **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**- **Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information**- **14.1 UN number or ID number**- **ADR, IMDG, IATA**

UN1719

- **14.2 UN proper shipping name**- **ADR, IMDG, IATA**

CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)

(Contd. on page 10)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

Trade name: MAFRASOL 2.0

(Contd. of page 9)

**- 14.3 Transport hazard class(es)****- ADR, IMDG, IATA**

**- Class** 8 Corrosive substances.  
**- Label** 8

**- 14.4 Packing group****- ADR, IMDG, IATA** II**- 14.5 Environmental hazards:** Not applicable.**- 14.6 Special precautions for user**

**- Warning:** Corrosive substances.  
**- Kenler Number:** 80  
**- EMS Number:** F-A,S-B  
**- Segregation groups** Alkalis  
**- Stowage Category** A  
**- Segregation Code** SG22 Stow "away from" ammonium salts  
SG35 Stow "separated from" SGG1-acids

**- 14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

**- Transport/Additional information:**

**- ADR**  
**- Limited quantities (LQ)** 1L  
**- Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml  
**- Transport category** 2  
**- Tunnel restriction code** E  
**- IMDG**  
**- Limited quantities (LQ)** 1L  
**- Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

## SECTION 15: Regulatory information

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

**- Directive 2012/18/EU**  
**- Named dangerous substances - ANNEX I** None of the ingredients is listed.  
**- National regulations**  
**- Classification according to VbF:** Void  
**- Technical instructions (air):**

Class	Share in %
NK	2.0

**- Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.  
**- 15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

GB  
(Contd. on page 11)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.05.2022

Version number 1

Revision: 04.05.2022

Trade name: MAFRASOL 2.0

(Contd. of page 10)

### SECTION 16: Other information

**- Relevant phrases**

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.

**- Department issuing data specification sheet:** Ma-Fra Laboratories

**- Contact:** lab@mafra.it

**- Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Met. Corr. 1: Corrosive to metals – Category 1
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Corr. 1A: Skin corrosion/irritation – Category 1A
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

**- \* Data compared to the previous version altered.**