

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

Printing date 02.02.2018

Version number 1

Revision: 02.02.2018

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

- 1.1 Product identifier**- Trade name: PRIMUS****- 1.2 Relevant identified uses of the substance or mixture and uses advised against***No further relevant information available.***- Sector of Use SU21** Consumer uses: Private households / general public / consumers**- Application of the substance / the mixture** All-purpose cleaner**- Uses advised against***The mixture is not recommended for industrial, professional and consumer applications not specified as relevant identified uses***- 1.3 Details of the supplier of the safety data sheet****- Manufacturer/Supplier:**

MA-FRA S.p.A.

Via Aquileia, 44/46

20021 Baranzate (MI) ITALIA

mafra@mafra.it

Tel. +39 023569981

- Informing department: E-mail: lab@mafra.it**- 1.4 Emergency telephone number:** Contact the local hospital or the poison control center closest to you

SECTION 2: Hazards identification

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

GHS05 corrosion

*Skin Corr. 1B 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:***Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts**potassium hydroxide**tetrasodium ethylenediaminetetraacetate**Decanol, ethoxylated***- Hazard statements***H314 Causes severe skin burns and eye damage.***- Precautionary statements***P102 Keep out of reach of children.**P280 Wear eye protection / face protection.**P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*

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

- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures
- Description: Mixture of substances

- Dangerous components:

CAS: 68439-57-6 EINECS: 270-407-8	Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts ☠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315	5-15%
CAS: 64-02-8 EINECS: 200-573-9 Reg.nr.: 01-2119486762-27	tetrasodium ethylenediaminetetraacetate ☠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; ⚠ Acute Tox. 4, H332	<5%
CAS: 51981-21-6 Reg.nr.: 01-2119493601	glutamic acid, N,N-diacetic acid, tetrasodium salt ☠ Met. Corr.1, H290	<5%
CAS: 26183-52-8 Polymer	Decanol, ethoxylated ☠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	<5%
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	<5%
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	<2%
CAS: 111-76-2 EINECS: 203-905-0 Reg.nr.: 01-2119475108-36	2-butoxyethanol ⚠ Acute Tox. 4, H302; ⚠ Acute Tox. 4, H312; ⚠ Acute Tox. 4, H332; ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2, H319	<2%
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; ⚠ Acute Tox. 4, H302	<2%

- Regulation (EC) No 648/2004

anionic surfactants	≥5 - <15%
EDTA and salts thereof, polycarboxylates, non-ionic surfactants, phosphonates, perfumes (CITRONELLOL, LINALOOL)	<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

- After inhalation In case of unconsciousness bring patient into stable side position for transport.
- After skin contact Instantly wash with water and soap and rinse thoroughly.
- After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.
- After swallowing In case of persistent symptoms consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents** 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.
- **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** Not required.
- **6.2 Environmental precautions:**
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).
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **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:** Not required.
- **Further information about storage conditions:** None.
- **Storage class**
- **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

- **Additional information about design of technical systems:** No further data; see item 7.

- 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/m³

111-76-2 2-butoxyethanol

WEL Short-term value: 246 mg/m³, 50 ppm

Long-term value: 123 mg/m³, 25 ppm

Sk, BMGV

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- DNELs**64-02-8 tetrasodium ethylenediaminetetraacetate**

Oral	Systemic Long-term Effects	25 mg/Kg bw/day (Consumers)
Inhalative	Local long-term effects	1.5 mg/m ³ (Industrial Workers)
		0.6 mg/m ³ (Consumers)
	Local short-term effects	3 mg/m ³ (Industrial Workers)
		1.2 mg/m ³ (Consumers)

111-76-2 2-butoxyethanol

Oral	Systemic short-term effects	6.3 mg/m ³ (Consumers)
Dermal	Systemic long-term effects	125 mg/Kg bw/day (Industrial Workers)
		75 mg/Kg bw/day (Consumers)
Inhalative	Systemic Short-term Effects	89 mg/Kg bw/day (Industrial Workers)
		89 mg/Kg bw/day (Consumers)
	Local long-term effects	67.5 mg/m ³ (Industrial Workers)
		40.5 mg/m ³ (Consumers)
	Local short-term effects	246 mg/m ³ (Industrial Workers)
		147 mg/m ³ (Consumers)
	Systemic long-term effects	98 mg/m ³ (Industrial Workers)
		59 mg/m ³ (Consumers)
	Systemic Short-term Effects	1,091 mg/m ³ (Industrial Workers)
		426 mg/m ³ (Consumers)

1310-73-2 sodium hydroxide

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

- PNECs**64-02-8 tetrasodium ethylenediaminetetraacetate**

PNEC STP	43 mg/L (STP)
Soil	0.72 mg/Kg (Soil)
Soft Water	2.2 mg/L (Water)
Sea water	0.22 mg/L (Water)

111-76-2 2-butoxyethanol

PNEC STP	463 mg/L (STP)
Soil	2.33 mg/Kg (Soil)
Soft Water	8.8 mg/L (Water)
Sea water	0.88 mg/L (Water)
Sediment (sea water)	3.46 mg/Kg (Water)

- 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**- Personal protective equipment****- General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

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Wash hands during breaks and at the end of the work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

- **Breathing equipment:** Not required.

- **Protection of hands:**



Protective 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

Neoprene gloves

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed safety glasses.

SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form: Liquid

Colour: Yellow

- **Odour:** Pleasant

- **Odour threshold:** Not determined.

- **pH-value at 20 °C:** 11

- **Change in condition**

Melting point/freezing point: Not determined

Initial boiling point and boiling range: 100 °C

- **Flash point:** >100 °C

- **Inflammability (solid, gaseous)** Not applicable.

- **Decomposition temperature:** Not determined.

- **Self-inflammability:** Product is not selfigniting.

- **Explosive properties:** Product is not explosive.

- **Critical values for explosion:**

Lower: Not determined.

Upper: Not determined.

- **Vapour pressure at 20 °C:** 23 hPa

- **Density at 20 °C** 1.11 g/cm³

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with**

Water: Fully miscible

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**

dynamic: Not determined.

kinematic: Not determined.

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- 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity Stable under normal conditions
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.

- LD/LC50 values that are relevant for classification:

1310-58-3 potassium hydroxide

Oral	LD50	365 mg/Kg (rat)
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111-76-2 2-butoxyethanol

Oral	LD50	1,746 mg/Kg (rat)
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Dermal	LD50	>2,000 mg/Kg (RAT)
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1310-73-2 sodium hydroxide

Oral	LD50	2,000 mg/Kg (rat)
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32210-23-4 Dorysil

Oral	LD50	5,000 mg/Kg (rat)
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106-22-9 Citronellol

Oral	LD50	3,450 mg/Kg (rat)
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Dermal	LD50	2,650 mg/Kg (rbt)
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141-78-6 ethyl acetate

Oral	LD50	4,935 mg/Kg (rbt)
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- Primary irritant effect:
- Skin corrosion/irritation Causes severe skin burns and eye damage.
- Serious eye damage/irritation Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

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

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

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)

141-78-6 ethyl acetate

LC50 (4 h) 1,600 mg/L (rat)

- 12.2 Persistence and degradability No further relevant information available.

- 12.3 Bioaccumulative potential No further relevant information available.

- 12.4 Mobility in soil No further relevant information available.

- Additional ecological information:

- General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

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.

- 12.5 Results of PBT and vPvB assessment

- PBT: Not applicable.

- vPvB: Not applicable.

- 12.6 Other adverse effects No further relevant information available.

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.

Can be deposited with household garbage with prior chemical-physical or biological treatment following consultations with the operator of the waste disposal facility and the pertinent authorities and under adherence to the necessary technical regulations.

- Uncleaned packagings:

- Recommendation: Disposal must be made according to official regulations.

- Recommended cleaning agent: Water, if necessary with cleaning agent.

SECTION 14: Transport information

- UN-Number

- ADR, IMDG, IATA

UN1824

- 14.2 UN proper shipping name

- ADR, IMDG, IATA

SODIUM HYDROXIDE SOLUTION

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- 14.3 Transport hazard class(es)

- ADR, IMDG, IATA



- Class 8 Corrosive substances.

- Label 8

- Packing group

- ADR, IMDG, IATA II

- 14.5 Environmental hazards: Not applicable.

- 14.6 Special precautions for user Warning: Corrosive substances.

- Kemler Number: 80

- EMS Number: F-A,S-B

- Segregation groups Alkalies

- Stowage Category A

- Segregation Code SG35 Stow "separated from" acids.

- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 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.

- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

- National regulations

- Classification according to VbF: Void

- Technical instructions (air):

Class	Share in %
NK	2.0

- Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

- Relevant phrases

H290 May be corrosive to metals.

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*H302 Harmful if swallowed.**H312 Harmful in contact with skin.**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 Corr. 1B: Skin corrosion/irritation – Category 1B**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.**