Ludwik - for cleaning fireplace glass

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: Ludwik - for cleaning fireplace glass

Other means of identification:

Not relevant

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

Relevant uses (Consumer use): Cleaner

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

GRUPA INCO S.A.
ul. Wspólna 25
00-519 Warszawa - Mazowieckie - Polska
Phone: +48 22 71 15 900
info.produkty@inco.pl
www.inco.pl

1.4 Emergency telephone number: 111

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Eye Dam. 1: Serious eye damage, Category 1, H318
Met. Corr. 1: Corrosive to metals, Category 1, H290
Skin Corr. 1B: Skin corrosion, Category 1B, H314

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger

Hazard statements:

Met. Corr. 1: H290 - May be corrosive to metals.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P234: Keep only in original packaging.
P280: Wear protective gloves.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P310: Immediately call a poison center/doctor.
P501: Dispose of contents/container according to the separated collection system used in your municipality.

Substances that contribute to the classification

sodium hydroxide (CAS: 1310-73-2); 2-aminoethanol (CAS: 141-43-5); D-Glucopyranose, oligomers, decyl octyl glycosides (CAS: 68515-73-1)

Additional labeling:

Sodium hydroxide; 2-aminoethanol;

2.3 Other hazards:

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

3.1 Substance:

Not relevant

3.2 Mixture:

Chemical description: Mixture composed of chemical products

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 1310-73-2 EC: 215-185-5 Index: 011-002-00-6 REACH: 01-2119457892-27-XXXX	**sodium hydroxide**[1]	Self-classified	**1 - <3%**
	Regulation 1272/2008	Eye Dam. 1: H318; Met. Corr. 1: H290; Skin Corr. 1A: H314 - Danger	
CAS: 107-98-2 EC: 203-539-1 Index: 603-064-00-3 REACH: 01-2119457435-35-XXXX	**1-methoxy-2-propanol**[1]	ATP ATP01	**1 - <3%**
	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	
CAS: 10101-89-0 EC: 231-509-8 Index: Not relevant REACH: 01-2119489800-32-XXXX	**Trisodium orthophosphate**[1]	Self-classified	**1 - <3%**
	Regulation 1272/2008	Eye Irrit. 2: H319; Skin Irrit. 2: H315; STOT SE 3: H335 - Warning	
CAS: 141-43-5 EC: 205-483-3 Index: 603-030-00-8 REACH: 01-2119486455-28-XXXX	**2-aminoethanol**[1]	ATP CLP00	**1 - <3%**
	Regulation 1272/2008	Acute Tox. 4: H302+H312+H332; Skin Corr. 1B: H314 - Danger	
CAS: 68515-73-1 EC: 500-220-1 Index: Not relevant REACH: 01-2119488530-36-XXXX	**D-Glucopyranose, oligomers, decyl octyl glycosides**[1]	Self-classified	**1 - <3%**
	Regulation 1272/2008	Eye Dam. 1: H318 - Danger	
CAS: 64-02-8 EC: 200-573-9 Index: 607-428-00-2 REACH: 01-2119486762-27-XXXX	**tetrasodium ethylene diamine tetraacetate**[1]	Self-classified	**1 - <3%**
	Regulation 1272/2008	Acute Tox. 4: H302+H332; Eye Dam. 1: H318; STOT RE 2: H373 - Danger	

[1] Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	Specific concentration limit
sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	% (w/w) >=0,1: Met. Corr. 1 - H290 % (w/w) >=5: Skin Corr. 1A - H314 2<= % (w/w) <5: Skin Corr. 1B - H314 0,5<= % (w/w) <2: Skin Irrit. 2 - H315 % (w/w) >=2: Eye Dam. 1 - H318 0,5<= % (w/w) <2: Eye Irrit. 2 - H319
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	% (w/w) >=5: STOT SE 3 - H335

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
tetrasodium ethylene diamine tetraacetate CAS: 64-02-8 EC: 200-573-9	LD50 oral	1913 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation vapour	11 mg/L *	
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	LD50 oral	1089 mg/kg	Rat
	LD50 dermal	1100 mg/kg	
	LC50 inhalation vapour	11 mg/L	

* Equivalent ATE value of the substance applicable to the exposure route of the product. For the ATE value associated with the exposure route of the substance, see section 11.

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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

- CONTINUED ON NEXT PAGE -

SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.
Spillages in water or sea:
Small spillages:
Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.
Large spillages:
If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used. KEEP ONLY IN ORIGINAL PACKAGING.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC,Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
1-methoxy-2-propanol (1)	IOELV (8h)	100 ppm	375 mg/m³
CAS: 107-98-2 EC: 203-539-1	IOELV (STEL)	150 ppm	568 mg/m³
2-aminoethanol (1)	IOELV (8h)	1 ppm	2,5 mg/m³
CAS: 141-43-5 EC: 205-483-3	IOELV (STEL)	3 ppm	7,6 mg/m³

(1) Skin

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
sodium hydroxide	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 1310-73-2	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 215-185-5	Inhalation	Not relevant	Not relevant	Not relevant	1 mg/m³
1-methoxy-2-propanol	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 107-98-2	Dermal	Not relevant	Not relevant	183 mg/kg	Not relevant
EC: 203-539-1	Inhalation	553,5 mg/m³	553,5 mg/m³	369 mg/m³	Not relevant
Trisodium orthophosphate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 10101-89-0	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 231-509-8	Inhalation	Not relevant	Not relevant	17,87 mg/m³	Not relevant
2-aminoethanol	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 141-43-5	Dermal	Not relevant	Not relevant	3 mg/kg	Not relevant
EC: 205-483-3	Inhalation	Not relevant	Not relevant	1 mg/m³	0,51 mg/m³
D-Glucopyranose, oligomers, decyl octyl glycosides	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 68515-73-1	Dermal	Not relevant	Not relevant	595000 mg/kg	Not relevant
EC: 500-220-1	Inhalation	Not relevant	Not relevant	420 mg/m³	Not relevant
tetrasodium ethylene diamine tetraacetate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 64-02-8	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 200-573-9	Inhalation	Not relevant	3 mg/m³	Not relevant	1,5 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
sodium hydroxide	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 1310-73-2	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 215-185-5	Inhalation	Not relevant	Not relevant	Not relevant	1 mg/m³
1-methoxy-2-propanol	Oral	Not relevant	Not relevant	33 mg/kg	Not relevant
CAS: 107-98-2	Dermal	Not relevant	Not relevant	78 mg/kg	Not relevant
EC: 203-539-1	Inhalation	Not relevant	Not relevant	43,9 mg/m³	Not relevant
Trisodium orthophosphate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 10101-89-0	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 231-509-8	Inhalation	Not relevant	Not relevant	7,66 mg/m³	Not relevant
2-aminoethanol	Oral	Not relevant	Not relevant	1,5 mg/kg	Not relevant
CAS: 141-43-5	Dermal	Not relevant	Not relevant	1,5 mg/kg	Not relevant
EC: 205-483-3	Inhalation	Not relevant	Not relevant	0,18 mg/m³	0,28 mg/m³
D-Glucopyranose, oligomers, decyl octyl glycosides	Oral	Not relevant	Not relevant	35,7 mg/kg	Not relevant
CAS: 68515-73-1	Dermal	Not relevant	Not relevant	357000 mg/kg	Not relevant
EC: 500-220-1	Inhalation	Not relevant	Not relevant	124 mg/m³	Not relevant
tetrasodium ethylene diamine tetraacetate	Oral	Not relevant	Not relevant	25 mg/kg	Not relevant
CAS: 64-02-8	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 200-573-9	Inhalation	Not relevant	1,2 mg/m³	Not relevant	0,6 mg/m³

PNEC:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
1-methoxy-2-propanol	STP	100 mg/L	Fresh water	10 mg/L
CAS: 107-98-2	Soil	4,59 mg/kg	Marine water	1 mg/L
EC: 203-539-1	Intermittent	100 mg/L	Sediment (Fresh water)	52,3 mg/kg
	Oral	Not relevant	Sediment (Marine water)	5,2 mg/kg
2-aminoethanol	STP	100 mg/L	Fresh water	0,07 mg/L
CAS: 141-43-5	Soil	1,29 mg/kg	Marine water	0,007 mg/L
EC: 205-483-3	Intermittent	0,028 mg/L	Sediment (Fresh water)	0,357 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,036 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	STP	560 mg/L	Fresh water	0,176 mg/L
CAS: 68515-73-1	Soil	0,654 mg/kg	Marine water	0,018 mg/L
EC: 500-220-1	Intermittent	0,27 mg/L	Sediment (Fresh water)	1,516 mg/kg
	Oral	0,11111 g/kg	Sediment (Marine water)	0,152 mg/kg
tetrasodium ethylene diamine tetraacetate	STP	43 mg/L	Fresh water	2,2 mg/L
CAS: 64-02-8	Soil	0,72 mg/kg	Marine water	0,22 mg/L
EC: 200-573-9	Intermittent	1,2 mg/L	Sediment (Fresh water)	Not relevant
	Oral	Not relevant	Sediment (Marine water)	Not relevant

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

If the working conditions and/or safety measures adopted do not allow keeping the airborne concentration of the product below the exposure limits (if any) or at acceptable levels (if no exposure limits exist), suitable respiratory protection equipment chosen by a qualified professional should be used.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)	CE CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	CE CAT II	EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CE CAT I		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	CE CAT II	EN ISO 20347:2022	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2022 y EN 13832-1:2019

F.- Additional emergency measures

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	4 % weight
V.O.C. density at 20 ºC:	44 kg/m³ (44 g/L)
Average carbon number:	3
Average molecular weight:	75,8 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Fluid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	101 ºC
Vapour pressure at 20 ºC:	2329 Pa
Vapour pressure at 50 ºC:	12271,06 Pa (12,27 kPa)
Evaporation rate at 20 ºC:	Not relevant *

Product description:

Density at 20 ºC:	1100 kg/m³
Relative density at 20 ºC:	1,1
Dynamic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 40 ºC:	Not relevant *
Concentration:	Not relevant *
pH:	11 (at 1 %)
Vapour density at 20 ºC:	Not relevant *
Partition coefficient n-octanol/water 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Not relevant *
Solubility properties:	Highly water-soluble
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

Flammability:

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	287 ºC
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *
Particle characteristics:	
Median equivalent diameter:	Not relevant *

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	H290 May be corrosive to metals.
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *
Other safety characteristics:	
Surface tension at 20 ºC:	Not relevant *
Refraction index:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

- CONTINUED ON NEXT PAGE -

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: Not relevant
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
sodium hydroxide	LD50 oral	>2000 mg/kg	
CAS: 1310-73-2 EC: 215-185-5	LD50 dermal	>2000 mg/kg	
	LC50 inhalation dust	>5 mg/L	
tetrasodium ethylene diamine tetraacetate	LD50 oral	1913 mg/kg	Rat
CAS: 64-02-8 EC: 200-573-9	LD50 dermal	>2000 mg/kg	
	LC50 inhalation dust	1,5 mg/L	

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
1-methoxy-2-propanol	LD50 oral	>2000 mg/kg	
CAS: 107-98-2	LD50 dermal	>2000 mg/kg	
EC: 203-539-1	LC50 inhalation vapour	>20 mg/L	
D-Glucopyranose, oligomers, decyl octyl glycosides	LD50 oral	>2000 mg/kg	
CAS: 68515-73-1	LD50 dermal	>2000 mg/kg	
EC: 500-220-1	LC50 inhalation vapour	>20 mg/L	
Trisodium orthophosphate	LD50 oral	7400 mg/kg	Rat
CAS: 10101-89-0	LD50 dermal	>2000 mg/kg	
EC: 231-509-8	LC50 inhalation dust	>5 mg/L	
2-aminoethanol	LD50 oral	1089 mg/kg	Rat
CAS: 141-43-5	LD50 dermal	1100 mg/kg	
EC: 205-483-3	LC50 inhalation vapour	11 mg/L	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	40847,14 mg/kg (Calculation method)	0 %
Dermal	55000 mg/kg (Calculation method)	0 %
LC50 inhalation vapour	347 mg/L (4 h) (Calculation method)	0 %

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
sodium hydroxide	LC50	189 mg/L (48 h)	Leuciscus idus	Fish
CAS: 1310-73-2	EC50	33 mg/L	Crangon crangon	Crustacean
EC: 215-185-5	EC50	Not relevant		
1-methoxy-2-propanol	LC50	20800 mg/L (96 h)	Pimephales promelas	Fish
CAS: 107-98-2	EC50	23300 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-539-1	EC50	1000 mg/L (168 h)	Selenastrum capricornutum	Algae
2-aminoethanol	LC50	349 mg/L (96 h)	Cyprinus carpio	Fish
CAS: 141-43-5	EC50	65 mg/L (48 h)	Daphnia magna	Crustacean
EC: 205-483-3	EC50	22 mg/L (72 h)	Scenedesmus subspicatus	Algae
D-Glucopyranose, oligomers, decyl octyl glycosides	LC50	126 mg/L (96 h)	Brachydanio rerio	Fish
CAS: 68515-73-1	EC50	151 mg/L (48 h)	Acartia tonsa	Crustacean
EC: 500-220-1	EC50	27 mg/L (72 h)	Scenedesmus subspicatus	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
2-aminoethanol	NOEC	1,24 mg/L	Oryzias latipes	Fish
CAS: 141-43-5 EC: 205-483-3	NOEC	0,85 mg/L	Daphnia magna	Crustacean
D-Glucopyranose, oligomers, decyl octyl glycosides	NOEC	1,8 mg/L	Danio rerio	Fish
CAS: 68515-73-1 EC: 500-220-1	NOEC	2 mg/L	Daphnia magna	Crustacean
tetrasodium ethylene diamine tetraacetate	NOEC	25,7 mg/L	Danio rerio	Fish
CAS: 64-02-8 EC: 200-573-9	NOEC	25 mg/L	Daphnia magna	Crustacean

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SECTION 12: ECOLOGICAL INFORMATION (continued)

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
1-methoxy-2-propanol	BOD5	Not relevant	Concentration	100 mg/L
CAS: 107-98-2	COD	Not relevant	Period	28 days
EC: 203-539-1	BOD5/COD	Not relevant	% Biodegradable	90 %
2-aminoethanol	BOD5	Not relevant	Concentration	20 mg/L
CAS: 141-43-5	COD	Not relevant	Period	21 days
EC: 205-483-3	BOD5/COD	Not relevant	% Biodegradable	90 %
D-Glucopyranose, oligomers, decyl octyl glycosides	BOD5	Not relevant	Concentration	Not relevant
CAS: 68515-73-1	COD	Not relevant	Period	28 days
EC: 500-220-1	BOD5/COD	Not relevant	% Biodegradable	100 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
1-methoxy-2-propanol	BCF	3
CAS: 107-98-2	Pow Log	-0.44
EC: 203-539-1	Potential	Low
2-aminoethanol	BCF	3
CAS: 141-43-5	Pow Log	-1.31
EC: 205-483-3	Potential	Low
tetrasodium ethylene diamine tetraacetate	BCF	2
CAS: 64-02-8	Pow Log	-13
EC: 200-573-9	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-aminoethanol	Koc	0.27	Henry	3,7E-5 Pa·m³/mol
CAS: 141-43-5	Conclusion	Very High	Dry soil	Not relevant
EC: 205-483-3	Surface tension	5,025E-2 N/m (25 °C)	Moist soil	Not relevant
D-Glucopyranose, oligomers, decyl octyl glycosides	Koc	50	Henry	1,2E-8 Pa·m³/mol
CAS: 68515-73-1	Conclusion	Very High	Dry soil	Not relevant
EC: 500-220-1	Surface tension	Not relevant	Moist soil	Not relevant
tetrasodium ethylene diamine tetraacetate	Koc	1046	Henry	0E+0 Pa·m³/mol
CAS: 64-02-8	Conclusion	Low	Dry soil	Not relevant
EC: 200-573-9	Surface tension	Not relevant	Moist soil	Not relevant

Highly water-soluble

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Type of waste (Regulation (EU) No 1357/2014):

Not relevant

Waste management (disposal and evaluation):

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2025 and RID 2025:

14.1	**UN number or ID number:**	UN1719
14.2	**UN proper shipping name:**	CAUSTIC ALKALI LIQUID, N.O.S. (sodium hydroxide)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Special regulations:	274
	Tunnel restriction code:	E
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 41-22:

14.1	**UN number or ID number:**	UN1719
14.2	**UN proper shipping name:**	CAUSTIC ALKALI LIQUID, N.O.S. (sodium hydroxide)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	II
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	274
	EmS Codes:	F-A, S-B
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
	Segregation group:	SGG18
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2025:

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SECTION 14: TRANSPORT INFORMATION (continued)

14.1	**UN number or ID number:**	UN1719
14.2	**UN proper shipping name:**	CAUSTIC ALKALI LIQUID, N.O.S. (sodium hydroxide)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

SECTION 15: REGULATORY INFORMATION

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

- Article 95, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) No 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Regulation (EC) No 648/2004 on detergents:

In accordance with this regulation the product complies with the following:

The tensoactives contained in this mixture comply with the biodegradibility criteria stipulated in Regulation (EC) nº648/2004 on detergents. The information to prove this is available to the relevant authorities of the Member States and will be shown to them by direct request or the request of a detergent manufacturer.

Seveso III:

Not relevant

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

- Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents
- Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

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SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Not relevant

Texts of the legislative phrases mentioned in section 2:

H290: May be corrosive to metals.
H318: Causes serious eye damage.
H314: Causes severe skin burns and eye damage.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.
Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Met. Corr. 1: H290 - May be corrosive to metals.
Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

Eye Dam. 1: Calculation method
Skin Corr. 1B: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

- END OF SAFETY DATA SHEET -