


Ludwik - grill cleaner

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

- 1.1 Product identifier:** Ludwik - grill cleaner
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: 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:** +48 22 7115900 (7.30-15.30)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) n° 1272/2008:
Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.
Eye Dam. 1: Serious eye damage, Category 1, H318
Met. Corr. 1: Corrosive to metals, Category 1, H290
Skin Corr. 1A: Skin corrosion, Category 1A, H314
- 2.2 Label elements:**
CLP Regulation (EC) n° 1272/2008:
Danger
- 
- Hazard statements:**
Met. Corr. 1: H290 - May be corrosive to metals
Skin Corr. 1A: 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/protective clothing/eye protection/face protection
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 and / or their container according to the separated collection system used in your municipality
- Substances that contribute to the classification**
- Sodium hydroxide; 2-aminoethanol;
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**
Non-applicable

** Changes with regards to the previous version

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
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

3.2 Mixture:

Chemical description: Mixture composed of chemical products

Components:

In accordance with Annex II of Regulation (EC) n°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-XXX	Sodium hydroxide ¹ Regulation 1272/2008 Eye Dam. 1: H318; Met. Corr. 1: H290; Skin Corr. 1A: H314 - Danger	Self-classified  3 - <3 %
CAS: 107-98-2 EC: 203-539-1 Index: 603-064-00-3 REACH 01-2119457435-35-XXX	1-methoxy-2-propanol ¹ Regulation 1272/2008 Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	ATP ATP01  1 - <3 %
CAS: 10101-89-0 EC: 231-509-8 Index: Non-applicable REACH 01-2119489800-32-XXX	Trisodium orthophosphate ¹ Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; STOT SE 3: H335 - Warning	Self-classified  1 - <3 %
CAS: 141-43-5 EC: 205-483-3 Index: 603-030-00-8 REACH 01-2119486455-28-XXX	2-aminoethanol ¹ Regulation 1272/2008 Acute Tox. 4: H302+H312+H332; Skin Corr. 1B: H314 - Danger	ATP CLP00  1 - <3 %
CAS: 68515-73-1 EC: 500-220-1 Index: Non-applicable REACH 01-2119488530-36-XXX	D-Glucopyranose, oligomers, decyl octyl glycosides ¹ Regulation 1272/2008 Eye Dam. 1: H318 - Danger	Self-classified  1 - <3 %
CAS: 64-02-8 EC: 200-573-9 Index: 607-428-00-2 REACH 01-2119486762-27-XXX	Tetrasodium ethylene diamine tetraacetate ¹ Regulation 1272/2008 Acute Tox. 4: H302+H332; Eye Dam. 1: H318 - Danger	Self-classified  1 - <3 %

¹ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 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) >=0,5: Eye Irrit. 2 - H319
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	% (w/w) >=5: STOT SE 3 - H335

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, it is recommended in case of intoxication symptoms 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, as 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.

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SECTION 4: FIRST AID MEASURES (continued)

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 its inhalation, to the respiratory system. 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:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use, containing flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

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 individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, 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:

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 inertization agent. Destroy 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.

6.2 Environmental precautions:

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

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. 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.

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SECTION 7: HANDLING AND STORAGE (continued)

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. Avoid projections and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

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.- Technical measures for storage

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:

Substances whose occupational exposure limits have to be monitored in the work environment

Identification		Environmental limits	
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	IOELV (8h)	100 ppm	375 mg/m ³
	IOELV (STEL)	150 ppm	563 mg/m ³
	Year	2017	
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	IOELV (8h)	1 ppm	2.5 mg/m ³
	IOELV (STEL)	3 ppm	7.6 mg/m ³
	Year	2017	

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m ³
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	50,6 mg/kg	Non-applicable
	Inhalation	Non-applicable	553,5 mg/m ³	369 mg/m ³	Non-applicable
Trisodium orthophosphate CAS: 10101-89-0 EC: 231-509-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4,07 mg/m ³	Non-applicable
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	3,3 mg/m ³
D-Glucopyranose, oligomers, decyl octyl glycosides CAS: 68515-73-1 EC: 500-220-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	595000 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	420 mg/m ³	Non-applicable
Tetrasodium ethylene diamine tetraacetate CAS: 64-02-8 EC: 200-573-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	2,5 mg/m ³	2,5 mg/m ³	Non-applicable	Non-applicable

DNEL (General population):

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m ³
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	Oral	Non-applicable	Non-applicable	3,3 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	18,1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	43,9 mg/m ³	Non-applicable
Trisodium orthophosphate CAS: 10101-89-0 EC: 231-509-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	3,04 mg/m ³	Non-applicable
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Oral	Non-applicable	Non-applicable	3,75 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,24 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	2 mg/m ³
D-Glucopyranose, oligomers, decyl octyl glycosides CAS: 68515-73-1 EC: 500-220-1	Oral	Non-applicable	Non-applicable	35,7 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	357000 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	124 mg/m ³	Non-applicable
Tetrasodium ethylene diamine tetraacetate CAS: 64-02-8 EC: 200-573-9	Oral	Non-applicable	Non-applicable	25 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	1,5 mg/m ³	1,5 mg/m ³	Non-applicable	Non-applicable

PNEC:

Identification				
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	STP	100 mg/L	Fresh water	10 mg/L
	Soil	5,49 mg/kg	Marine water	1 mg/L
	Intermittent	100 mg/L	Sediment (Fresh water)	52,3 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	5,2 mg/kg
Trisodium orthophosphate CAS: 10101-89-0 EC: 231-509-8	STP	50 mg/L	Fresh water	Non-applicable
	Soil	Non-applicable	Marine water	Non-applicable
	Intermittent	Non-applicable	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	STP	100 mg/L	Fresh water	0,085 mg/L
	Soil	0,035 mg/kg	Marine water	0,0085 mg/L
	Intermittent	0,025 mg/L	Sediment (Fresh water)	0,425 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0425 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides CAS: 68515-73-1 EC: 500-220-1	STP	560 mg/L	Fresh water	0,176 mg/L
	Soil	0,654 mg/kg	Marine water	0,0176 mg/L
	Intermittent	0,27 mg/L	Sediment (Fresh water)	1,516 mg/kg
	Oral	111,11 g/kg	Sediment (Marine water)	0,152 mg/kg
Tetrasodium ethylene diamine tetraacetate CAS: 64-02-8 EC: 200-573-9	STP	43 mg/L	Fresh water	2,2 mg/L
	Soil	0,72 mg/kg	Marine water	0,22 mg/L
	Intermittent	1,2 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection 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



The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.

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.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			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 6529:2001, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	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 y EN 13832-1

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see 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 °C:	44 kg/m ³ (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 °C:	Liquid
Appearance:	Fluid
Colour:	Colourless
Odour:	Odourless

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

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Odour threshold:	Non-applicable *
Volatility:	
Boiling point at atmospheric pressure:	101 °C
Vapour pressure at 20 °C:	2329 Pa
Vapour pressure at 50 °C:	12270 Pa (12 kPa)
Evaporation rate at 20 °C:	Non-applicable *
Product description:	
Density at 20 °C:	1100 kg/m ³
Relative density at 20 °C:	1,1
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	12
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Highly water-soluble
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Flammability:	
Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	287 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
Explosive:	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *
9.2 Other information:	
Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

*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.

10.2 Chemical stability:

Chemically stable under the 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:

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SECTION 10: STABILITY AND REACTIVITY (continued)

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	Combustive materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Not applicable

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 (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

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

Contains glycols. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health 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, its consumption causes burns destroying the full thickness of fabrics. For more information on the secondary effects of contact with the skin 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 dangerous 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 dangerous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous 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 dangerous 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 dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous 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 dangerous 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, as it does not contain substances classified as dangerous for this effect. 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 dangerous for this effect. For more information see section 3.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

H- Aspiration hazard:

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

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	LD50 oral	500 mg/kg	Rat
	LD50 dermal	1025 mg/kg	Rabbit
	LC50 inhalation	11 mg/L (4 h)	Rat
Tetrasodium ethylene diamine tetraacetate CAS: 64-02-8 EC: 200-573-9	LD50 oral	1913 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Trisodium orthophosphate CAS: 10101-89-0 EC: 231-509-8	LD50 oral	7400 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

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

Contains phosphates. Excessive discharge may cause eutrophication.

12.1 Toxicity:

Identification	Acute toxicity		Species	Genus
Sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	LC50	189 mg/L (48 h)	Leuciscus idus	Fish
	EC50	33 mg/L	Crangon crangon	Crustacean
	EC50	Non-applicable		
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	LC50	20800 mg/L (96 h)	Pimephales promelas	Fish
	EC50	23300 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1000 mg/L (168 h)	Selenastrum capricornutum	Algae
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	LC50	349 mg/L (96 h)	Cyprinus carpio	Fish
	EC50	65 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	22 mg/L (72 h)	Scenedesmus subspicatus	Algae
D-Glucopyranose, oligomers, decyl octyl glycosides CAS: 68515-73-1 EC: 500-220-1	LC50	126 mg/L (96 h)	Brachydanio rerio	Fish
	EC50	151 mg/L (48 h)	Acartia tonsa	Crustacean
	EC50	27 mg/L (72 h)	Scenedesmus subspicatus	Algae
Tetrasodium ethylene diamine tetraacetate CAS: 64-02-8 EC: 200-573-9	LC50	121 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	140 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	BOD5	Non-applicable	Concentration	20 mg/L
	COD	Non-applicable	Period	21 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %
D-Glucopyranose, oligomers, decyl octyl glycosides CAS: 68515-73-1 EC: 500-220-1	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %

12.3 Bioaccumulative potential:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

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

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Koc	0.27	Henry	3,7E-5 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	5,025E-2 N/m (25 °C)	Moist soil	No
D-Glucopyranose, oligomers, decyl octyl glycosides CAS: 68515-73-1 EC: 500-220-1	Koc	50	Henry	1,2E-8 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	Non-applicable	Moist soil	No
Tetrasodium ethylene diamine tetraacetate CAS: 64-02-8 EC: 200-573-9	Koc	1046	Henry	0E+0 Pa·m ³ /mol
	Conclusion	Low	Dry soil	No
	Surface tension	Non-applicable	Moist soil	No

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
20 01 29*	Detergents containing dangerous substances	Dangerous

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

HP4 Irritant — skin irritation and eye damage, HP8 Corrosive

Waste management (disposal and evaluation):

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-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) n°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 2017 and RID 2017:

** Changes with regards to the previous version

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SECTION 14: TRANSPORT INFORMATION ** (continued)



- 14.1 UN 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 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 38-16:



- 14.1 UN 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
 EmS Codes: F-A, S-B
 Physico-Chemical properties: see section 9
 Limited quantities: 1 L
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2017:



- 14.1 UN 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 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

** Changes with regards to the previous version

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable
 Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable
 Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable
 Article 95, REGULATION (EU) No 528/2012: Non-applicable
 REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

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SECTION 15: REGULATORY INFORMATION (continued)

Regulation (EC) n°648/2004 on detergents:

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

The tensoactives contained in this mixture comply with the biodegradability criteria stipulated in Regulation (EC) n°648/2004 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.

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

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, 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.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EC) N° 2015/830)

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

SECTION 2; 14

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) n° 1272/2008:

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SECTION 16: OTHER INFORMATION (continued)

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 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. 1A: Calculation method

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order 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: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -