

According to 1907/2006/EC (REACH), 2015/830/EU

Ludwik Classic - dishwasher tablets

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

1.1 Product identifier: Ludwik Classic - dishwasher tablets

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

Relevant uses: Dishwashing detergent

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) nº 1272/2008:

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

Eye Irrit. 2: Eye irritation, Category 2, H319 Skin Irrit. 2: Skin irritation, Category 2, H315

2.2 Label elements:

CLP Regulation (EC) no 1272/2008:

Warning



Hazard statements:

Eye Irrit. 2: H319 - Causes serious eye irritation Skin Irrit. 2: H315 - Causes skin irritation

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand

P102: Keep out of reach of children P264: Wash thoroughly after use

P302+P352: IF ON SKÍN: Wash with plenty of water

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

Continue rinsing

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

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of chemical products

Components:

In accordance with Annex II of Regulation (EC) nº1907/2006 (point 3), the product contains:

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^{**} Changes with regards to the previous version



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

| Identification | | Chemical name/Classification | | Concentration |
|---|---|--|-----------------|---------------|
| CAS: 497-19-8 | Sodium carbonate | | ATP CLP00 | |
| EC: 207-838-8 Index: 011-005-00-2 REACH: 01-2119485498-19-XXX | , | Eye Irrit. 2: H319 - Warning | (1) | 20 - <25 % |
| CAS: 1344-09-8 | Silicic acid, sodium sa | It (2.6 < MR <=3.2) | Self-classified | |
| EC: 215-687-4 Index: Non-applicable REACH: 01-2119448725-31-XXX | Regulation 1272/2008 | Eye Irrit. 2: H319; Skin Irrit. 2: H315; STOT SE 3: H335 - Warning | (1) | 10 - <20 % |
| CAS: 15630-89-4 | Disodium carbonate, o | compound with hydrogen peroxide (2:3) | Self-classified | |
| EC: 239-707-6 Index: Non-applicable REACH: 01-2119457268-30-XXX | dex: Non-applicable Regulation 1272/2008 ACH: 01-2119457268-30-XXX | Acute Tox. 4: H302; Eye Dam. 1: H318; Ox. Sol. 3: H272 - Danger | 1 4 6 | 10 - <20 % |
| CAS: 68439-51-0 | Alcohols, C12-14, etho | oxylated propoxylated | Self-classified | |
| EC: Non-applicable Index: Non-applicable REACH: Non-applicable | Regulation 1272/2008 | Aquatic Chronic 3: H412 | | 1 - <3 % |
| CAS: 3794-83-0 | Kwas 1-hydroksyetan | o 1,1-difosfonowy, sól sodowa | Self-classified | |
| EC: 223-267-7 Index: Non-applicable REACH: Non-applicable | Regulation 1272/2008 | Acute Tox. 4: H302; Eye Irrit. 2: H319; Met. Corr. 1: H290 - Warning | <u>(1)</u> | 1 - <3 % |
| CAS: 5970-45-6 | Zinc di(acetate) 2H2O | | Self-classified | |
| EC: 209-170-2 Index: Non-applicable REACH: Non-applicable | | Acute Tox. 4: H302+H312+H332; Aquatic Acute 1: H400; Aquatic Chronic 1: Irrit. 2: H319; Skin Irrit. 2: H315; STOT SE 3: H335 - Warning | H410; Eye | <0,151 % |

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, 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.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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. 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:

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SECTION 5: FIREFIGHTING MEASURES (continued)

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:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.2 Environmental precautions:

Avoid spillage into an aqueous medium as it contains substances potentially dangerous for this. Contain the product absorbed in hermetically sealed containers. In the case of serious spillage into an aqueous medium notify the relevant authority.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

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.

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

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

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

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal See sections 8 and 13.

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:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Substances whose occupational exposure limits have to be monitored in the work environment Nuisance dust: Inhalable dust 10 mg/m 3 // Respirable dust 4 mg/m 3

DNEL (Workers):

| | | Short exposure | | Long exposure | |
|---|------------|----------------|----------------|------------------------|----------------|
| Identification | | Systemic | Local | Systemic | Local |
| Sodium carbonate | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 497-19-8 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 207-838-8 | Inhalation | Non-applicable | Non-applicable | Non-applicable | 10 mg/m³ |
| Silicic acid, sodium salt (2.6 < MR <=3.2) | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 1344-09-8 | Dermal | Non-applicable | Non-applicable | 1,59 mg/kg | Non-applicable |
| EC: 215-687-4 | Inhalation | Non-applicable | Non-applicable | 5,61 mg/m ³ | Non-applicable |
| Disodium carbonate, compound with hydrogen peroxide (2:3) | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 15630-89-4 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 239-707-6 | Inhalation | Non-applicable | Non-applicable | Non-applicable | 5 mg/m³ |

DNEL (General population):

| | | Short | Short exposure Long exposure | | exposure |
|--|------------|----------------|------------------------------|------------------------|----------------|
| Identification | | Systemic | Local | Systemic | Local |
| Sodium carbonate | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 497-19-8 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 207-838-8 | Inhalation | Non-applicable | 10 mg/m ³ | Non-applicable | Non-applicable |
| Silicic acid, sodium salt (2.6 < MR <=3.2) | Oral | Non-applicable | Non-applicable | 0,8 mg/kg | Non-applicable |
| CAS: 1344-09-8 | Dermal | Non-applicable | Non-applicable | 0,8 mg/kg | Non-applicable |
| EC: 215-687-4 | Inhalation | Non-applicable | Non-applicable | 1,38 mg/m ³ | Non-applicable |
| Kwas 1-hydroksyetano 1,1-difosfonowy, sól sodowa | Oral | 6,5 mg/kg | Non-applicable | 6,5 mg/kg | Non-applicable |
| CAS: 3794-83-0 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 223-267-7 | Inhalation | Non-applicable | Non-applicable | Non-applicable | Non-applicable |

PNEC:

| Identification | | | | |
|---|--------------|----------------|-------------------------|----------------|
| Silicic acid, sodium salt (2.6 < MR <=3.2) | STP | 348 mg/L | Fresh water | 7,5 mg/L |
| CAS: 1344-09-8 | Soil | Non-applicable | Marine water | 1 mg/L |
| EC: 215-687-4 | Intermittent | 7,5 mg/L | Sediment (Fresh water) | Non-applicable |
| | Oral | Non-applicable | Sediment (Marine water) | Non-applicable |
| Disodium carbonate, compound with hydrogen peroxide (2:3) | STP | 16,24 mg/L | Fresh water | 0,035 mg/L |
| CAS: 15630-89-4 | Soil | Non-applicable | Marine water | 0,035 mg/L |
| EC: 239-707-6 | Intermittent | 0,035 mg/L | Sediment (Fresh water) | Non-applicable |
| | Oral | Non-applicable | Sediment (Marine water) | Non-applicable |
| Kwas 1-hydroksyetano 1,1-difosfonowy, sól sodowa | STP | 580 mg/L | Fresh water | 0,134 mg/L |
| CAS: 3794-83-0 | Soil | 41 mg/kg | Marine water | 0,014 mg/L |
| EC: 223-267-7 | Intermittent | Non-applicable | Sediment (Fresh water) | 59 mg/kg |
| | Oral | 12000 g/kg | Sediment (Marine water) | 5,9 mg/kg |

8.2 Exposure controls:

 $\mbox{\ensuremath{\mbox{A.-}}}$ 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 | CATI | | 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 liquid splash | CATII | 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 | CATI | | 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 | CATII | 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

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:

Appearance:

Color:

Characteristic

Odor:

Odour threshold:

Solid

Tablets

Characteristic

Characteristic

Volatility:

Boiling point at atmospheric pressure:

Vapour pressure at 20 °C:

Vapour pressure at 50 °C:

Vapour pressure at 50 °C:

Vapour pressure at 20 °C:

Non-applicable *

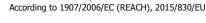
Non-applicable *

Non-applicable *

*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)

Product description:

Density at 20 °C: Non-applicable * Relative density at 20 °C: Non-applicable * Non-applicable * Dynamic viscosity at 20 °C: Kinematic viscosity at 20 °C: Non-applicable * Kinematic viscosity at 40 °C: Non-applicable * Concentration: Non-applicable * pH: 9,75 - 11,25 Non-applicable * Vapour density at 20 °C: Partition coefficient n-octanol/water 20 °C: Non-applicable * Solubility in water at 20 °C: Non-applicable * Solubility properties: Water-soluble Decomposition temperature: Non-applicable * Melting point/freezing point: Non-applicable * Explosive properties: Non-applicable *

Flammability:

Oxidising properties:

Flash Point:

Flammability (solid, gas):

Autoignition temperature:

Non-applicable *

237 °C

Lower flammability limit: Non-applicable *
Upper flammability limit: Non-applicable *

9.2 Other information:

Surface tension at 20 °C:

Refraction index:

Non-applicable *

*Nor-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.

Non-applicable *

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:

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

10.5 Incompatible materials:

| Acids | Water | Combustive materials | Combustible materials | Others |
|--------------------|----------------|----------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Precaution | Precaution | 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 (CO2), carbon monoxide and other organic compounds.



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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

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: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

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

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 |
|---|-----------------|----------------|-------|
| Disodium carbonate, compound with hydrogen peroxide (2:3) | LD50 oral | 1034 mg/kg | Rat |
| CAS: 15630-89-4 | LD50 dermal | Non-applicable | |
| EC: 239-707-6 | LC50 inhalation | Non-applicable | |
| Kwas 1-hydroksyetano 1,1-difosfonowy, sól sodowa | LD50 oral | 1219 mg/kg | Rat |
| CAS: 3794-83-0 | LD50 dermal | Non-applicable | |
| EC: 223-267-7 | LC50 inhalation | Non-applicable | |
| Sodium carbonate | LD50 oral | 4090 mg/kg | Rat |
| CAS: 497-19-8 | LD50 dermal | Non-applicable | |
| EC: 207-838-8 | LC50 inhalation | Non-applicable | |

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

| Identification | Acute toxicity | | Genus |
|-----------------------|-----------------|----------------|-------|
| Zinc di(acetate) 2H2O | LD50 oral | 794 mg/kg | Rat |
| CAS: 5970-45-6 | LD50 dermal | Non-applicable | |
| EC: 209-170-2 | LC50 inhalation | Non-applicable | |

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

| Identification | | Acute toxicity | Species | Genus |
|---|------|----------------------|---------------------|------------|
| Sodium carbonate | LC50 | 740 mg/L (96 h) | Gambussia afinis | Fish |
| CAS: 497-19-8 | EC50 | 265 mg/L (48 h) | Daphnia magna | Crustacean |
| EC: 207-838-8 | EC50 | Non-applicable | | |
| Disodium carbonate, compound with hydrogen peroxide (2:3) | LC50 | 70.7 mg/L (96 h) | Pimephales promelas | Fish |
| CAS: 15630-89-4 | EC50 | 4.9 mg/L (48 h) | Daphnia pulex | Crustacean |
| EC: 239-707-6 | EC50 | Non-applicable | | |
| Alcohols, C12-14, ethoxylated propoxylated | LC50 | 10 - 100 mg/L (96 h) | | Fish |
| CAS: 68439-51-0 | EC50 | 10 - 100 mg/L | | Crustacean |
| EC: Non-applicable | EC50 | 10 - 100 mg/L | | Algae |
| Zinc di(acetate) 2H2O | LC50 | 0.1 - 1 mg/L (96 h) | | Fish |
| CAS: 5970-45-6 | EC50 | 0.1 - 1 mg/L | | Crustacean |
| EC: 209-170-2 | EC50 | 0.1 - 1 mg/L | | Algae |

12.2 Persistence and degradability:

Not available

12.3 Bioaccumulative potential:

Not available

12.4 Mobility in soil:

Not available

12.5 Results of PBT and vPvB assessment:

Non-applicable

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

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 recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) $n^{o}1907/2006$ (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



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SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2015 and RID 2015:

14.1 UN number: Non-applicable
 14.2 UN proper shipping name: Non-applicable
 14.3 Transport hazard class(es): Non-applicable
 Labels: Non-applicable
 14.4 Packing group: Non-applicable

14.5 Dangerous for the No environment:

14.6 Special precautions for user

Special regulations:

Tunnel restriction code:

Physico-Chemical properties:

Limited quantities:

Non-applicable

see section 9

Non-applicable

14.7 Transport in bulk according to Non-applicable Annex II of Marpol and the

IBC Code:

Transport of dangerous goods by sea:

With regard to IMDG 37-14:

14.1 UN number: Non-applicable
 14.2 UN proper shipping name: Non-applicable
 14.3 Transport hazard class(es): Non-applicable
 Labels: Non-applicable
 14.4 Packing group: Non-applicable

14.5 Dangerous for the No environment:

14.6 Special precautions for user

Special regulations: Non-applicable

EmS Codes:

Physico-Chemical properties: see section 9
Limited quantities: Non-applicable

14.7 Transport in bulk according to Non-applicable
Annex II of Marpol and the

Transport of dangerous goods by air:

With regard to IATA/ICAO 2015:

IBC Code:

14.1 UN number: Non-applicable
 14.2 UN proper shipping name: Non-applicable
 14.3 Transport hazard class(es): Non-applicable
 Labels: Non-applicable
 14.4 Packing group: Non-applicable

14.5 Dangerous for the No

environment:

14.6 Special precautions for user

Physico-Chemical properties: see section 9

14.7 Transport in bulk according to Non-applicable

Annex II of Marpol and the

IBC Code:

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

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Ludwik Classic - dishwasher tablets

SECTION 15: REGULATORY INFORMATION (continued)

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

Regulation (EC) nº648/2004 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.

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) No 1907/2006 (Regulation (EC) No 2015/830)

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

Section: 2

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation

H319: Causes serious eye irritation

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:



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SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 4: H302 - Harmful if swallowed

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

Aquatic Acute 1: H400 - Very toxic to aquatic life

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects

Eye Dam. 1: H318 - Causes serious eye damage Eye Irrit. 2: H319 - Causes serious eye irritation Met. Corr. 1: H290 - May be corrosive to metals Ox. Sol. 3: H272 - May intensify fire, oxidiser Skin Irrit. 2: H315 - Causes skin irritation

STOT SE 3: H335 - May cause respiratory irritation

Classification procedure:

Skin Irrit. 2: Calculation method Eye Irrit. 2: 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://esis.jrc.ec.europa.eu 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.