

**Ludwik - washing up liquid: pomegranate with the vervain; lemon**

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

**1.1 Product identifier:** Ludwik - washing up liquid: pomegranate with the vervain; lemon

**Other means of identification:**

Non-applicable

**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.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412

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

**2.2 Label elements:**

**CLP Regulation (EC) No 1272/2008:**

Warning



**Hazard statements:**

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Eye Irrit. 2: H319 - Causes serious eye irritation.

**Precautionary statements:**

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

P102: Keep out of reach of children.

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.

P501: Dispose of contents / container to the waste according to local municipal waste management system.

**Supplementary information:**

EUH208: Contains reaction mass 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one. May produce an allergic reaction

**2.3 Other hazards:**

Product fails to meet PBT/vPvB criteria

Endocrine-disrupting properties: The product fails to meet the criteria.

\*\* Changes with regards to the previous version

**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) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 68891-38-3 EC: 500-234-8 Index: Non-applicable REACH: 01-2119488639-16-XXXX	<b>Alcohols, C12-14(even numbered), ethoxylated &lt; 2.5 EO, sulfates, sodium salts<sup>(1)</sup></b> Regulation 1272/2008 Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	Self-classified <b>10 - &lt;20 %</b>
CAS: 68439-57-6 EC: 931-534-0 Index: Non-applicable REACH: 01-2119513401-57-XXXX	<b>Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts<sup>(1)</sup></b> Regulation 1272/2008 Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	Self-classified <b>1 - &lt;3 %</b>
CAS: 147170-44-3 EC: Non-applicable Index: Non-applicable REACH: 01-2119489410-39-XXXX	<b>1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts<sup>(1)</sup></b> Regulation 1272/2008 Aquatic Chronic 3: H412; Eye Dam. 1: H318 - Danger	Self-classified <b>1 - &lt;3 %</b>
CAS: Non-applicable EC: 931-329-6 Index: Non-applicable REACH: 01-2119490100-53-XXXX	<b>Amides, c8-18(even numbered) and c18-unsatd., n, n-(hydroxyethyl)<sup>(1)</sup></b> Regulation 1272/2008 Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	Self-classified <b>1 - &lt;3 %</b>
CAS: 68155-09-9 EC: 268-938-5 Index: Non-applicable REACH: 01-2120779407-42-XXXX	<b>Amides, coco, N-[3-(dimethylamino)propyl], N-oxides<sup>(1)</sup></b> Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	Self-classified <b>0,1 - &lt;1 %</b>
CAS: 55965-84-9 EC: Non-applicable Index: 613-167-00-5 REACH: Non-applicable	<b>reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)<sup>(1)</sup></b> Regulation 1272/2008 Acute Tox. 2: H310+H330; Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1C: H314; Skin Sens. 1A: H317; EUH071 - Danger	ATP ATP13 <b>&lt;0,0015 %</b>

<sup>(1)</sup> 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	M-factor
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Acute 100
CAS: 55965-84-9 EC: Non-applicable	Chronic 100

Identification	Specific concentration limit
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	% (w/w) >=10: Eye Dam. 1 - H318 5<= % (w/w) <10: Eye Irrit. 2 - H319
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	% (w/w) >=5: Skin Irrit. 2 - H315 % (w/w) >=38: Eye Dam. 1 - H318 5<= % (w/w) <38: Eye Irrit. 2 - H319
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts CAS: 147170-44-3 EC: Non-applicable	% (w/w) >=10: Eye Dam. 1 - H318 4<= % (w/w) <10: Eye Irrit. 2 - H319
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Non-applicable	% (w/w) >=0,6: Skin Corr. 1C - H314 0,06<= % (w/w) <0,6: Skin Irrit. 2 - H315 % (w/w) >=0,6: Eye Dam. 1 - H318 0,06<= % (w/w) <0,6: Eye Irrit. 2 - H319 % (w/w) >=0,0015: Skin Sens. 1A - H317

\*\* Changes with regards to the previous version

**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.

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**Ludwik - washing up liquid: pomegranate with the vervain; lemon****SECTION 4: FIRST AID MEASURES (continued)****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:**

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

**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:**

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:****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 (SCBA). 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. 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:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

**For emergency responders:**

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

**6.2 Environmental precautions:**

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**SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)**

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

**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.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and destroy using safe methods (section 6).

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

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on 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

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

**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 workplace (European OEL, not country-specific legislation):

There are no applicable occupational exposure limits for the substances contained in the product

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2750 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	175 mg/m <sup>3</sup>	Non-applicable
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2158,33 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	152,22 mg/m <sup>3</sup>	Non-applicable

**Ludwik - washing up liquid: pomegranate with the vervain; lemon**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts CAS: 147170-44-3 EC: Non-applicable	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	12,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	44 mg/m <sup>3</sup>	Non-applicable
Amides, c8-18(even numbered) and c18-unsatd., n, n-(hydroxyethyl) CAS: Non-applicable EC: 931-329-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	4,16 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	73,4 mg/m <sup>3</sup>	Non-applicable
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides CAS: 68155-09-9 EC: 268-938-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,15 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,62 mg/m <sup>3</sup>	Non-applicable

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	Oral	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1650 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	52 mg/m <sup>3</sup>	Non-applicable
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	Oral	Non-applicable	Non-applicable	12,95 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1295 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	45,04 mg/m <sup>3</sup>	Non-applicable
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts CAS: 147170-44-3 EC: Non-applicable	Oral	Non-applicable	Non-applicable	7,5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	7,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	13,04 mg/m <sup>3</sup>	Non-applicable
Amides, c8-18(even numbered) and c18-unsatd., n, n-(hydroxyethyl) CAS: Non-applicable EC: 931-329-6	Oral	Non-applicable	Non-applicable	6,25 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	2,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	21,73 mg/m <sup>3</sup>	Non-applicable
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides CAS: 68155-09-9 EC: 268-938-5	Oral	Non-applicable	Non-applicable	0,3 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,73 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,5 mg/m <sup>3</sup>	Non-applicable

**PNEC:**

Identification				
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	STP	10000 mg/L	Fresh water	0,24 mg/L
	Soil	7,5 mg/kg	Marine water	0,024 mg/L
	Intermittent	0,071 mg/L	Sediment (Fresh water)	0,917 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,092 mg/kg
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	STP	4 mg/L	Fresh water	0,024 mg/L
	Soil	1,21 mg/kg	Marine water	0,002 mg/L
	Intermittent	0,02 mg/L	Sediment (Fresh water)	0,767 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,077 mg/kg
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts CAS: 147170-44-3 EC: Non-applicable	STP	3000 mg/L	Fresh water	0,013 mg/L
	Soil	0,8 mg/kg	Marine water	0,001 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	14,8 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	1,48 mg/kg

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**Ludwik - washing up liquid: pomegranate with the vervain; lemon**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification				
Amides, c8-18(even numbered) and c18-unsatd., n, n-(hydroxyethyl) CAS: Non-applicable EC: 931-329-6	STP	830 mg/L	Fresh water	0,007 mg/L
	Soil	0,035 mg/kg	Marine water	0,001 mg/L
	Intermittent	0,024 mg/L	Sediment (Fresh water)	0,195 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,019 mg/kg
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides CAS: 68155-09-9 EC: 268-938-5	STP	6,5 mg/L	Fresh water	0,0059 mg/L
	Soil	3,68 mg/kg	Marine water	0,00059 mg/L
	Intermittent	0,059 mg/L	Sediment (Fresh water)	18,4 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	1,84 mg/kg

**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



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

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.4 mm)		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.		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			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		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 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

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:**

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

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

**Volatile organic compounds:**

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

V.O.C. (Supply):	0,04 % weight
V.O.C. density at 20 °C:	0,38 kg/m <sup>3</sup> (0,38 g/L)
Average carbon number:	10
Average molecular weight:	136,2 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:	Characteristic
Odour:	Characteristic
Odour threshold:	Non-applicable *

**Volatility:**

Boiling point at atmospheric pressure:	100 °C
Vapour pressure at 20 °C:	2350 Pa
Vapour pressure at 50 °C:	12378,83 Pa (12,38 kPa)
Evaporation rate at 20 °C:	Non-applicable *

**Product description:**

Density at 20 °C:	1025 kg/m <sup>3</sup>
Relative density at 20 °C:	1,025
Dynamic viscosity at 20 °C:	1000 - 1800 cP
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	6 - 7
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 *

**Flammability:**

Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	225 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

**Particle characteristics:**

Median equivalent diameter:	Non-applicable
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**9.2 Other information:**

\*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)**

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

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

**Other safety characteristics:**

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 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	Not applicable	Not applicable	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	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<sub>2</sub>), 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

**Dangerous health implications:**

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

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

\*\* Changes with regards to the previous version



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**SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)**

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

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- 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 hazardous for the effects mentioned. For more information see section 3.  
IARC: Non-applicable
- 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. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

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

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.

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 hazardous 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 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:**

The mixture is not irritant to skin - the assessment with use of the bridge methods, comparison with reference formulations for which the tests were performed.

The mixture is irritant to eyes - the assessment with use of the bridge methods, comparison with reference formulations for which the tests were performed.

Classification number: DetNet/1135

The mixture has pH ca. 5,5, which as result might demonstrate other effect than substances mentioned in section 3.

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	LD50 oral	2290 mg/kg	Rat
	LD50 dermal	6300 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts CAS: 147170-44-3 EC: Non-applicable	LD50 oral	2430 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Non-applicable	LD50 oral	64 mg/kg	Rat
	LD50 dermal	87,12 mg/kg	Rabbit
	LC50 inhalation	0,33 mg/L (4 h)	Rat

**11.2 Information on other hazards:**

**Endocrine disrupting properties**

Endocrine-disrupting properties: The product fails to meet the criteria.

\*\* Changes with regards to the previous version

**Ludwik - washing up liquid: pomegranate with the vervain; lemon**

**SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)**

**Other information**

Non-applicable

\*\* Changes with regards to the previous version

**SECTION 12: ECOLOGICAL INFORMATION \*\***

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

**12.1 Toxicity:**

**Acute toxicity:**

Identification	Concentration	Species	Genus	
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	LC50	7,1 mg/L (96 h)	Danio rerio	Fish
	EC50	7,4 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	27 mg/L (72 h)	Scenedesmus subspicatus	Algae
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	LC50	4,2 mg/L (96 h)	Brachydanio rerio	Fish
	EC50	4,53 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	5,2 mg/L (72 h)	Skeletonema costatum	Algae
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts CAS: 147170-44-3 EC: Non-applicable	LC50	Non-applicable		
	EC50	20 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Amides, c8-18(even numbered) and c18-unsatd., n, n-(hydroxyethyl) CAS: Non-applicable EC: 931-329-6	LC50	2,4 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	3,2 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	23,4 mg/L (72 h)	Scenedesmus subspicatus	Algae
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides CAS: 68155-09-9 EC: 268-938-5	LC50	>0.1 - 1 mg/L (96 h)		Fish
	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
	EC50	>0.1 - 1 mg/L (72 h)		Algae
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Non-applicable	LC50	>0.1 - 1 mg/L (96 h)		Fish
	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
	EC50	>0.1 - 1 mg/L (72 h)		Algae

**Chronic toxicity:**

Identification	Concentration	Species	Genus	
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	NOEC	0,2 mg/L	Oncorhynchus mykiss	Fish
	NOEC	0,27 mg/L	Daphnia magna	Crustacean
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	NOEC	Non-applicable		
	NOEC	6,3 mg/L	Daphnia magna	Crustacean
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts CAS: 147170-44-3 EC: Non-applicable	NOEC	0,135 mg/L	Oncorhynchus mykiss	Fish
	NOEC	0,32 mg/L	Daphnia magna	Crustacean
Amides, c8-18(even numbered) and c18-unsatd., n, n-(hydroxyethyl) CAS: Non-applicable EC: 931-329-6	NOEC	0,32 mg/L	Oncorhynchus mykiss	Fish
	NOEC	0,1 mg/L	Daphnia magna	Crustacean

**12.2 Persistence and degradability:**

**Substance-specific information:**

Identification	Degradability		Biodegradability	
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	BOD5	Non-applicable	Concentration	10.5 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

**Ludwik - washing up liquid: pomegranate with the vervain; lemon**

**SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)**

Identification	Degradability		Biodegradability	
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	BOD5	Non-applicable	Concentration	20 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	96 %
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts CAS: 147170-44-3 EC: Non-applicable	BOD5	Non-applicable	Concentration	10 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	82 %
Amides, c8-18(even numbered) and c18-unsatd., n, n-(hydroxyethyl) CAS: Non-applicable EC: 931-329-6	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	77 %

**12.3 Bioaccumulative potential:**

**Substance-specific information:**

Identification	Bioaccumulation potential	
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	BCF	71
	Pow Log	-1.3
	Potential	Moderate
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts CAS: 147170-44-3 EC: Non-applicable	BCF	71
	Pow Log	
	Potential	Moderate
Amides, c8-18(even numbered) and c18-unsatd., n, n-(hydroxyethyl) CAS: Non-applicable EC: 931-329-6	BCF	44
	Pow Log	1.35
	Potential	Moderate

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts CAS: 68439-57-6 EC: 931-534-0	Koc	1.6	Henry	6,7E-2 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
Amides, c8-18(even numbered) and c18-unsatd., n, n-(hydroxyethyl) CAS: Non-applicable EC: 931-329-6	Koc	243	Henry	3,7E-7 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	No
	Surface tension	2,77E-2 N/m (24,5 °C)	Moist soil	No

**12.5 Results of PBT and vPvB assessment:**

Product fails to meet PBT/vPvB criteria

**12.6 Endocrine disrupting properties:**

Endocrine-disrupting properties: The product fails to meet the criteria.

**12.7 Other adverse effects:**

Not described

\*\* Changes with regards to the previous version

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

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

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

HP14 Ecotoxic, HP4 Irritant — skin irritation and eye damage

**Waste management (disposal and evaluation):**

- CONTINUED ON NEXT PAGE -

**Ludwik - washing up liquid: pomegranate with the vervain; lemon**

**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-dangerous 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 2021 and RID 2021:

- 14.1 UN number or ID 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 Environmental hazards:** No
- 14.6 Special precautions for user**
- Special regulations: Non-applicable
- Tunnel restriction code: Non-applicable
- Physico-Chemical properties: see section 9
- Limited quantities: Non-applicable
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 40-20:

- 14.1 UN number or ID 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 Marine pollutant:** No
- 14.6 Special precautions for user**
- Special regulations: Non-applicable
- EmS Codes:
- Physico-Chemical properties: see section 9
- Limited quantities: Non-applicable
- Segregation group: Non-applicable
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2022:

**Ludwik - washing up liquid: pomegranate with the vervain; lemon****SECTION 14: TRANSPORT INFORMATION (continued)**

<b>14.1 UN number or ID number:</b>	Non-applicable
<b>14.2 UN proper shipping name:</b>	Non-applicable
<b>14.3 Transport hazard class(es):</b>	Non-applicable
Labels:	Non-applicable
<b>14.4 Packing group:</b>	Non-applicable
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Physico-Chemical properties:	see section 9
<b>14.7 Maritime transport in bulk according to IMO instruments:</b>	Non-applicable

**SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains bronopol (INN), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (Product-type 2, 4, 6, 11, 12, 13) ; bronopol (INN) (Product-type 2, 6, 11, 12, 22)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**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 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.

**Seveso III:**

Non-applicable

**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

**Ludwik - washing up liquid: pomegranate with the vervain; lemon****SECTION 15: REGULATORY INFORMATION (continued)**

- 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:**

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.:**

COMMISSION REGULATION (EU) 2020/878  
SECTION 2, SECTION 3, SECTION 11, SECTION 12

**Texts of the legislative phrases mentioned in section 2:**

H319: Causes serious eye irritation.  
H412: Harmful to aquatic life with long lasting effects.

**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. 2: H310+H330 - Fatal in contact with skin or if inhaled.  
Acute Tox. 3: H301 - Toxic if swallowed.  
Acute Tox. 4: H302 - Harmful if swallowed.  
Aquatic Acute 1: H400 - Very toxic to aquatic life.  
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.  
Aquatic Chronic 2: H411 - 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.  
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.  
Skin Irrit. 2: H315 - Causes skin irritation.  
Skin Sens. 1A: H317 - May cause an allergic skin reaction.

**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:**

**Ludwik - washing up liquid: pomegranate with the vervain; lemon****SECTION 16: OTHER INFORMATION (continued)**

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

**Other information:**

Classification method:  
Aquatic Chronic 3: the calculation method  
Eye Irrit 2/Eye Dam.1: the bridge methods  
Skin Irrit 2: the bridge methods

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 -