

APC ALL PURPOSE CLEANER LILY

SECTION 1. SUBSTANCE/MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

1.1. Product identification:

APC ALL PURPOSE CLEANER LILY

UFI: XWP0-00Y3-500J-H8AY

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

Identified uses: All purpose cleaner. Universal APC liquid for general cleaning.

PC-CLN-2 Non-abrasive cleaners for general purpose (or all purpose).

Uses advised against: No uses advised against.

1.3. Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o.

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Person responsible for the safety data sheet: ranal@ranal.pl

1.4. Emergency telephone

+48 34 329 45 03 (8.00 - 15.00)

SECTION 2. HAZARDS IDENTIFICATION

2.1 Mixture classification

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

Eye Irrit. 2: Serious eye damage/eye irritation, hazard category 2, H319

2.2. Label elements

EC Regulation 1272/2008(CLP): Warning.



Hazard statements:

Eye Irrit. 2: H319 Causes eye 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 hands thoroughly after handling.

P280 Wear eye protection.

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 the contents/container in accordance with applicable waste management regulations.

Additional information:

EUH208 Contains methylothiazol-3(2H)-one. May cause an allergic reaction.

Estimated acute toxicity (ATE mix):

1.4% (oral) of the mixture consists of component(s) of unknown toxicity.

2.3. Other hazards

The substances used do not meet the PBT/vPvB criteria:

It does not contain substances that disrupt the functioning of the endocrine system.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Chemical description: A water mixture based on dyes, fragrances and surfactants.

Components:

Identification		Chemical Name	Classification	Concentration
CAS:	126-92-1	Sodium etasulfate ⁽¹⁾	Regulation 1272/2008: Eye Dam. 1: H318; Skin Irrit. 2: H315- Danger	1 - <2.5%
EC	204-812-8			
Index	Not applicable			
no:	01-2119971586-23-XXXX			
REACH:				

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CAS: EC Index no: REACH:	68439-46-3 614-482-0 Not applicable 01-2119980051-45-XXXX	Alcohol, C9-11, ethoxylated (6 EO)⁽¹⁾	Regulation 1272/2008: Acute Tox. 4: H302; Eye Dam. 1: H318- Danger	1 - <2.5%
CAS: EC Index no: REACH:	112-34-5 203-961-6 603-096-00-8 01-2119475104-44-XXXX	2-(2-butoxyethoxy)ethanol⁽²⁾ ATP CLP00	Regulation 1272/2008: Eye Irrit. 2: H319 - Warning	0.5 - <1%
CAS: EC Index no: REACH:	141-43-5 205-483-3 603-030-00-8 01-2119486455-28-XXXX	2-aminoethanol⁽²⁾	Regulation 1272/2008: Acute Tox. 4: H302+H312+H332; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; STOT SE 3: H335- Danger	0,5 %
CAS: EC Index no: REACH:	2682-20-4 220-239-6 613-326-00-9 01-2120764690-50-XXXX	2-methylisothiazol-3(2H)- one⁰ ATP ATP13	Regulation 1272/2008: Acute Tox. 2: H330; Acute Tox. 3: H301+H311; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1A: H317; EUH071- Danger	<0.0015%

⁽¹⁾ The substance poses a risk to health or the environment, meets the criteria set out in Commission Regulation (EU) 2020/878.

⁽²⁾ Substance with the EU workplace exposure limit.

For more information on the hazards caused by the substances see sections 11, 12 and 16.

Other information:

2-methylisothiazol-3(2H)-one

CAS: 2682-20-4

EC: 220-239-6

M-factor:

Acute: 10

Chronic: 1

Sodium etasulfate

CAS: 126-92-1

EC: 204-812-8

Specific concentration limit:

% (m/m) >=20: Eye Dam. 1 - H318

10<= % (m/m) <20: Eye Irrit. 2- H319

2-aminoethanol CAS: 141-43-5

EC: 205-483-3

Specific concentration limit:

% (m/m) >=5: STOT SE 3 - H335

2-methylisothiazol-3(2H)-one

CAS: 2682-20-4

EC: 220-239-6

Specific concentration limit:

% (m/m) >=0.0015: Skin Sens. 1A - H317

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Symptoms of poisoning may only occur after exposure, therefore, in case of doubt, direct exposure to a chemical product or prolonged malaise, consult a doctor and show him the MSDS of the product.

Inhalation:
The product has not been classified as hazardous in case of inhalation, but despite this, symptoms of poisoning occur, it is recommended to remove the victim from the place of exposure and provide him with access to fresh air and rest. If symptoms persist, call for medical help.

Contact with skin:
The product has not been classified as hazardous in skin contact. However, in the event of contact with the skin, it is recommended to remove contaminated clothing and shoes, clean the skin and wash the victim under the shower with neutral soap and then rinse with plenty of water. Consult a doctor if disturbing symptoms occur.

Contact with eyes:
Rinse the eyes thoroughly with water at room temperature for 15 minutes. Do not allow the injured to rub or close his eyes. If the injured person wears contact lenses, they should be removed unless they are stuck to the eye, otherwise it may cause further injuries. In all cases, after washing, consult a doctor as soon as possible and show him this Material Safety Data Sheet.

Ingestion/aspiration:
Do not induce vomiting, and if this occurs, keep the head tilted forward to prevent aspiration of stomach contents. Provide the injured person with rest. Rinse mouth and throat with water as they have probably been contaminated when swallowed.

4.2. Most important symptoms both acute and delayed

Acute and delayed symptoms of exposure are described in sections 2 and 11 of the MSDS.

4.3. Indications of any immediate medical attention and special treatment needed

No data.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing agents:

The product is not flammable under normal conditions of handling, and storage. In the event of ignition due to improper handling, storage or use, dry powder extinguishers (ABC powder) should preferably be used in accordance with the Regulations on Fire Protection Devices.

Unsuitable extinguishing agents:

No data.

5.2. Special hazards arising from the substance or mixture

Combustion or thermal decomposition form reaction sub-products which can be highly toxic and in consequence may pose a serious health risk.

5.3. Advice for fire fighters

Depending on the extent of the fire, it may be necessary to use complete protective clothing and autonomous breathing equipment. A minimum supply of emergency devices and measures (fire blankets, first aid kit) in accordance with Directive 89/654 / EC should be available.

Additional provisions:

Act in accordance with the Internal Emergency Plan and information leaflets describing what to do in the event of accidents and other emergencies. Disable all ignition sources In the event of fire cool the containers used for storing products vulnerable to ignition, explosion or BLEVE explosion due to high temperatures. Do not let products used to extinguish a fire enter the water tank.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures

For persons not being part of the personnel eliminating the effects of the failure:

Secure the release of the product, if this activity does not pose a threat to the people who carry it out. In the event of possible contact with the spilled product, it is obligatory to use personal protective equipment (see section 8). Evacuate the site and remove people who do not have the proper protective measures.

For personnel taking part in emergency procedures:

Wear protective clothing. Move unprotected persons to a safe place. See section 8.

6.2. Environmental precautions

Prevent contamination of groundwater, surface water, watercourses, soil and sewage system, as it contains substances hazardous to water. Store absorbed product in sealed containers. In the event of significant quantities of the product entering the water tank, the relevant authorities should be notified.

6.3. Methods and materials for containment and cleaning up

It is recommended to:

Absorb the spilled product with sand or or neutral absorbent and transport it to a safe place. Do not use sawdust or other flammable materials to absorb the product.

For any product disposal considerations, see section 13.

6.4. Reference to other sections

Product waste handling - section 13 of the safety data sheet, personal protective equipment - section 8 of the safety data sheet.

SECTION 7. HANDLING AND STORAGE OF SUBSTANCES AND MIXTURES

7.1. Precautions for safe handling

Precautions necessary for safe handling of the product:

Act in accordance with applicable law to prevent workplace hazards related to manual handling of loads. Keep the place tidy and clean and dispose of the product with safe methods (Section 6).

Technical recommendations for the prevention of fires and explosions:

The product is not flammable under normal conditions of handling, and storage. It is recommended to pour the product slowly to prevent formation of electrostatic charges that could negatively affect flammable products. Information on conditions and substances to be avoided is provided in section 10.

Technical recommendations to prevent toxicological risks:

Do not eat or drink when handling the product and wash your hands with an appropriate cleaning agent after completing the procedure.

Technical recommendations to prevent environmental risks:

It is recommended to keep absorbent material close to the product (see section 6.3).

7.2. Conditions for safe storage, including any incompatibilities

Technical aspects of storage:
Min. temp.: 5°C
Max. temp.: 30°C
Maximum time: 24 months

General conditions of storage:
Avoid sources of heat, radiation and electrostatics. Keep away from food. For more information see section 10.5.

7.3. Special end uses:
See section 1.2.

SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

8.1. Control parameters

Occupational exposure limit values should be controlled for the following substances:

2-(2-butoxyethoxy)ethanol
CAS: 112-34-5, EC: 203-961-6
MPC: 67 mg/m³
MPIC: 100 mg/m³

2-aminoethanol
CAS: 141-43-5 EC: 205-483-3
MPC: 2.5 mg/m³
MPIC: 7.5 mg/m³

Propane-2-ol
CAS: 67-63-0 EC: 200-661-7
MPC: 900 mg/m³
MPIC: 1200 mg/m³

DNEL (Workers):

Identification		Short-time exposure		Long-time exposure	
		Systemic	Local	Systemic	Local
Sodium etasulfate CAS: 126-92-1 EC: 204-812-8	Oral	No data	No data	No data	No data
	Skin	No data	No data	4060 mg/kg	No data
	Inhalation	No data	No data	285 mg/m³	No data
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Oral	No data	No data	No data	No data
	Skin	No data	No data	83 mg/kg	No data
	Inhalation	No data	101.2 mg/m³	67.5 mg/m³	67.5 mg/m³
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Oral	No data	No data	No data	No data
	Skin	No data	No data	3 mg/kg	No data
	Inhalation	No data	No data	1 mg/m³	0.51 mg/m³
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	Oral	No data	No data	No data	No data
	Skin	No data	No data	No data	No data
	Inhalation	No data	0.043 mg/m³	No data	0.021 mg/m³

DNEL (Population):

Identification		Short-time exposure		Long-time exposure	
		Systemic	Local	Systemic	Local
Sodium etasulfate CAS: 126-92-1 EC: 204-812-8	Oral	No data	No data	24 mg/kg	No data
	Skin	No data	No data	2440 mg/kg	No data
	Inhalation	No data	No data	85 mg/m³	No data
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Oral	No data	No data	5 mg/kg	No data
	Skin	No data	No data	50 mg/kg	No data
	Inhalation	No data	60.7 mg/m³	40.5 mg/m³	40.5 mg/m³
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Oral	No data	No data	1.5 mg/kg	No data
	Skin	No data	No data	1.5 mg/kg	No data
	Inhalation	No data	No data	0.18 mg/m³	0.28 mg/m³
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	Oral	0.053 mg/kg	No data	0.027 mg/kg	No data
	Skin	No data	No data	No data	No data
	Inhalation	No data	0.043 mg/m³	No data	0.021 mg/m³

PNEC:

Identification					
Sodium etasulfate CAS: 126-92-1 EC: 204-812-8	Sewage treatment plant	1.35 mg/L	Fresh water	0.136 mg/L	
	Soil	0.22 mg/kg	Sea water	0.014 mg/L	
	Intermittent	4.83 mg/L	Sediment (fresh water)	1.5 mg/kg	
	Oral	No data	Sediment (Sea water)	0.15 mg/kg	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Sewage treatment plant	200 mg/L	Fresh water	1.1 mg/L	
	Soil	0.32 mg/kg	Sea water	0.11 mg/L	
	Intermittent	11 mg/L	Sediment (fresh water)	4.4 mg/kg	
	Oral	0.056 g/kg	Sediment (Sea water)	0.44 mg/kg	
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Sewage treatment plant	100 mg/L	Fresh water	0.07 mg/L	
	Soil	1.29 mg/kg	Sea water	0.007 mg/L	
	Intermittent	0.028 mg/L	Sediment (fresh water)	0.357 mg/kg	
	Oral	No data	Sediment (Sea water)	0.036 mg/kg	

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2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	Sewage treatment plant	0.23 mg/L	Fresh water	0.00339 mg/L
	Soil	0.047 mg/kg	Sea water	0.00339 mg/L
	Intermittent	0.00339 mg/L	Sediment (fresh water)	No data
	Oral	No data	Sediment (Sea water)	No data

8.2. Exposure control

A. Personal protective measures such as personal protective equipment:

As a preventive measure, it is recommended to use protective clothing marked with the "CE marking". More information on protective clothing (storage, use, cleaning, maintenance, protection class...) can be found in the information leaflet provided by the manufacturer of the protective clothing. The directions here are given for the pure product. The instructions for the diluted product may vary according to the dilution ratio, type of use, method of application, etc. When determining the obligation to install emergency showers and / or eyewash devices in the storeroom, the regulations regarding the storage of chemical products will be taken into account. For more information see sections 7.1 and 7.2

All the information contained in this section- due to the lack of information on the protective equipment owned by the company- should be treated as a recommendation in order to prevent hazards when working with the product.

B. Respiratory protection:

In the event of mist formation or in a situation where the maximum permissible concentration is exceeded, it will be necessary to use respiratory protection.

C. Special hands protection:




Pictogram	Protective equipment	Labelling	CEN standards	Note:
 Obligatory hands protection.	Disposable gloves protecting against chemical agents (Material: Nitrile, Breakthrough time: > 480 min., Thickness of the material: 0.4 mm)		EN ISO 21420:2020	Replace the gloves in case of any sign of damage.

As the product is made up of different materials, it is not possible to verify the strength of the glove completely reliably in advance and therefore has to be checked before use.



D. Eye and face protection:

Pictogram	Protective equipment	Labelling	CEN standards	Note:
 Obligatory face protection.	Panoramic glasses protecting against liquid splashes and/or spatter		EN 166:2002 EN ISO 4007:2018	Clean every day and disinfect regularly according to the manufacturer's instructions. It is recommended to use where there is a risk of liquid splashing.

E. Body protection:

Pictogram	Protective equipment	Labelling	CEN standards	Note:
	Workwear			Replace if there are any signs of damage. For prolonged exposure to the product, EC III is recommended for professional/industrial users, in accordance with EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994
	Non-slip work footwear		EN ISO 20347:2012	Replace if there are any signs of damage. For prolonged exposure to the product, EC III is recommended for professional/industrial users, in accordance with EN ISO 20345:2012 i EN 13832-1:2007

F. Additional emergency measures:

Emergency measures	Standards	Emergency measures	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eye rinse device	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

VOC concentration 20°C: 12.8 g/L

Environmental control:

Pursuant to the Community law on environmental protection, it is recommended to prevent the product and its packaging from getting into the environment. For more information see section 7.1.

Volatile Organic Compounds:

According to the requirements of the applicable regulations this product has the following properties:

VOC (content): 0.74 % mass

VOC concentration 20°C: 7.58 kg/m³ (7.58 g/L)

Average number of carbons 2.67

Average molecular weight: 60.59 g/mol

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical aspect:

Physical state 20°C:

Appearance:

Liquid

Liquid

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Colour: Blue
Odour: Characteristic
Odour threshold: no data*

Volatility:

Boiling point at atmospheric pressure: 100°C
Vapour pressure at 20°C: no data*
Vapour pressure at 50°C: no data*
Evaporation rate: no data*

Product characteristics:

Density 20°C: 1000 - 1030 kg/m³
Relative density 20°C: no data*
Dynamic viscosity 20°C: no data*
Kinematic viscosity 20°C: no data*
Kinematic viscosity 40°C: no data*
Concentration: no data*
pH: 8-10 (for 100% solution)
Vapour density 20°C: no data*
n-octanol/water partition coefficient 20°C: no data*
Solubility in water 20°C: no data*
Degree of solubility: soluble in water
Breakdown point: no data*
Melting /freezing point: no data*

Flammability:

Flash point: not flammable (>60°C)
Flammability (solid, gas): no data*
Auto ignition point: 204°C
Bottom flammability limit: no data*
Top flammability limit: no data*

Particles characteristics:

Median of diameter equivalent: Not applicable.

9.2. Other information

Information on the physical hazard classes:

Explosive properties: no data*
Oxidizing properties: no data*
Substances corrosive to metals: no data*
*There is no information about hazards caused by the product.

Heat of combustion: no data*
Aerosols - total percentage (by mass) of flammable components: no data*

Other safety features:

Surface tension 20°C: no data*
Refraction index: no data*
*There is no information about hazards caused by the product.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

The product is not reactive in conditions of storage. See section 7.

10.2. Chemical stability

The product is chemically stable conditions of storage and use.

10.3. Possibility of hazardous reactions

There are no hazardous reactions if the product is stored as recommended.

10.4. Conditions to be avoided

Shocks and friction	Contact with air	Heating	Sunlight	Humidity
Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.

10.5. Incompatible materials

Acids	Water	Oxidants	Flammable materials	Other
Avoid strong acids	Not applicable.	Avoid direct contact	Not applicable.	Avoid strong bases

10.6. Hazardous decomposition products

See Sections 10.3, 10.4 and 10.5 for details of decomposition products. Depending on decomposition conditions, complex chemical mixtures may be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds. For more information see section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

There are no experimental data on the toxicological properties of the product.

Contains glycols, possible health hazards, therefore it is recommended not to inhale its vapours for too long.

Health hazard:

In case of prolonged exposure or at concentrations higher than the established occupational exposure limits, side effects on health may occur depending on the route of exposure:

A. Ingestion (acute effects):

- Acute toxicity: Based on available data, the classification criteria are not met, but the product contains substances classified as hazardous if swallowed. For more information see section 3.

- Caustic/Irritating: Based on available data, the classification criteria are not met, but the product contains substances classified as hazardous. For more information see section 3.

B. Inhalation (acute effects):

- Acute toxicity: Based on available data, the classification criteria are not met, but the product contains substances classified as hazardous if inhaled. For more information see section 3.

- Caustic/Irritating: In case of prolonged inhalation, the product has a destructive effect on the tissues of the mucous membranes and the upper respiratory tract.

C. Contact with skin and eyes (acute effects):

- Contact with skin: Based on available data, the classification criteria are not met, but the product contains substances classified as hazardous in contact with skin. For more information see section 3.

- Contact with eyes: Causes damage in contact with eyes.

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

- Carcinogenicity: Based on available data, the classification criteria are not met. The product does not contain substances classified as hazardous due to effects mentioned before. For more information see section 3.

- May cause genetic effects: Based on available data, the classification criteria are not met. The product does not contain substances classified as hazardous. For more information see section 3.

- May cause harmful effect to reproduction: Based on available data, the classification criteria are not met. The product does not contain substances classified as hazardous. For more information see section 3.

E.- sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met. The product does not contain substances classified as hazardous due to their sensitizing effects. For more information see section 3.

- Skin: Based on available data, the classification criteria are not met, but the product contains substances classified as hazardous due to sensitizing effects. For more information see section 3.

F.- Specific target Organ Toxicity (STOT) time of exposure:

Based on available data, the classification criteria are not met, but the product contains substances classified as hazardous if inhaled. 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. The product does not contain substances classified as hazardous. For more information see section 3.

- Skin: Based on available data, the classification criteria are not met. The product does not contain substances classified as hazardous. For more information see section 3.

H.- Aspiration hazard:

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

Other information:

No data.

Detailed toxicological information on substances:

Identification	Acute toxicity		Type
Alcohol, C9-11, ethoxylated (6 EO) CAS: 68439-46-3 EC: 614-482-0	LD50 oral	500 mg/kg (ATEi)	
	LD50 dermal	No data	
	LC50 inhalation	No data	
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)	Rat
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	LD50 oral	120 mg/kg	Rat
	LD50 dermal	242 mg/kg	Rat
	LC50 inhalation	No data	

Estimated acute toxicity (ATE mix):

ATE mix		Components of unknown toxicity
Oral	50000 mg/kg (calculation method)	1.4 %
Skin	>2000 mg/kg (calculation method)	Not applicable.
Inhalation	> 20 mg/L (4 h) (Calculation method)	Not applicable.

11.2. Information on other hazards

Endocrine disrupting properties:

The product does not contain substances disrupting the functioning of the endocrine system.

Other information:

No data.

SECTION 12. ECOLOGICAL INFORMATION

There are no experimental data on the ecotoxicological properties of the mixture itself.

12.1. Toxicity

Acute toxicity:

Identification	Concentration		Type	Type
Alcohol, C9-11, ethoxylated (6 EO) CAS: 68439-46-3 EC: 614-482-0	LC50	6 mg/L (96 h)	N/A	Fish
	EC50	5.3 mg/L (48 h)	N/A	Crustacea
	EC50	No data		
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	LC50	1300 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	2850 mg/L (24 h)	Daphnia magna	Crustacea
	EC50	53 mg/L (192 h)	Microcystis aeruginosa	Alga
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	Crustacea
	EC50	22 mg/L (72 h)	Scenedesmus subspicatus	Alga
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	LC50	4.77 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	0.934 mg/L (48 h)	Daphnia magna	Crustacea
	EC50	No data		

Chronic toxicity:

Identification	Concentration		Type	Type
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	NOEC	1.24 mg/L	Oryzias latipes	Fish
	NOEC	0.85 mg/L	Daphnia magna	Crustacea
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	NOEC	4.93 mg/L	Oncorhynchus mykiss	Fish
	NOEC	0.044 mg/L	Daphnia magna	Crustacea

12.2. Persistence and degradability

Detailed information on the substances:

Identification	Degradability		Biodegradability	
Alcohol, C9-11, ethoxylated (6 EO) CAS: 68439-46-3 EC: 614-482-0	BOD5	No data	Concentration	No data
	COD	No data	Period	28 days
	BOD/COD	No data	% biodegradable	60%
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	BOD5	0.25 g O2/g	Concentration	100 mg/L
	COD	2.08 g O2/g	Period	28 days
	BOD/COD	0.12	% biodegradable	92%
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	BOD5	No data	Concentration	20 mg/L
	COD	No data	Period	21 days
	BOD/COD	No data	% biodegradable	90%
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	BOD5	No data	Concentration	10 mg/L
	COD	No data	Period	28 days
	BOD/COD	No data	% biodegradable	55.8%

12.3. Bioaccumulative potential

Detailed information on the substances:

Identification	Bioaccumulative potential	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	BCF	0.46
	Log POW	0.56
	Potential	Low
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	BCF	3
	Log POW	-1.31
	Potential	Low
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	BCF	
	Log POW	-0.49
	Potential	

12.4. Mobility in soil

Identification	Absorption/desorption		Variability	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Koc	48	Henry's constant	7.2E-9 Pa·m³/mol
	Conclusions	Very high	Of dry soil	No
	Surface tension	3.395E-2 N/m (25 °C)	Of wet soil	No
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Koc	0.27	Henry's constant	3.7E-5 Pa·m³/mol
	Conclusions	Very high	Of dry soil	No
	Surface tension	5.025E-2 N/m (25 °C)	Of wet soil	No
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	Koc	No data	Henry's constant	0E+0 Pa·m³/mol
	Conclusions	No data	Of dry soil	No data
	Surface tension	No data	Of wet soil	No data

12.5. Results of PBT and vPvB assessment

The substances used do not meet the criteria of PBT/vPvB.

12.6. Other hazardous effects

The product does not contain substances disrupting the functioning of the endocrine system.

12.7. Other hazardous effects

No data.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Code	Description:	Waste type (Commission Regulation (EU) no 1357/2014)
20 01 30	detergents other than those mentioned in 20 01 29	Not hazardous

Waste type (Commission Regulation (EU) no 1357/2014):

No data.

Waste administration (disposal and assessment):

It should be handed over to a specialized disposal company authorized to assess and remove waste in accordance with Annex 1 and Annex 2 (Directive 2008/98 / EC of the European Parliament and of the Council). According to the code 15 01 (2014/955 / EU), when the container is in direct contact with the product, it should be handled in the same way as the product. Otherwise, it should be treated as non-hazardous waste. It is not recommended to discharge it into water courses. See section 6.2

Waste administration provisions:

Pursuant to Annex II of Regulation (EC) No. 1907/2006 (REACH), Community or national provisions related to waste management have been adopted.

Community law: Directive 2008/98/EC, 2014/955/EU, Commission Regulation (EU) no 1357/2014.

SECTION 14. TRANSPORT INFORMATION

Ground transport of dangerous goods:

According to the requirements of ADR 2021 and RID 2021.

14.1 UN number:

No data.

14.2. UN proper shipping name

No data.

14.3. Transport hazard class

No data.

14.4. Packaging group

No data.

14.5. Environmental hazards

No.

14.6. Special precautions for users

Special regulations: no data.

Tunnel restriction code: no data.

Physical and chemical properties: see section 9

Limited Quantities: no data.

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

No data.

Sea transport of dangerous goods:

According to IMDG 40-20.

14.1 UN number or ID number

No data.

14.2. UN proper shipping name

No data.

14.3. Transport hazard class

No data.

14.4. Packaging group

No data.

14.5. Marine pollutant:

No.

14.6. Special precautions for users

Special regulations:

No data.

EmS code:

Physical and chemical properties: see section 9

Limited Quantities: no data.

Segregation group: no data.

14.7. Sea transport in bulk in accordance with IMO instruments

No data.

Air transport of dangerous goods:

According to the requirements of IATA/ ICAO 2022.

14.1 UN number or ID number

No data.

14.2. UN proper shipping name

No data.

14.3. Transport hazard class

No data.

14.4. Packaging group

No data.

14.5. Environmental hazards

No.

14.6. Special precautions for users

Physical and chemical properties: see section 9

14.7. Air transport in bulk in accordance with IATA/ ICAO instruments

No data.

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations / legislations specific for the substance or mixture

Regulation (EC) No 528/2012: contains preservatives to protect the original properties of the treated products. Contains 1,2-benzisothiazol-3(2H)-one, 2-methylisothiazol-3(2H)-one.

Substances candidating to authorization pursuant to EC Regulation 1907/2006(REACH): No data.

Substances present in Annex XIV of REACH (authorization list) and expiry date: No data.

Regulation (EC) No 1005/2009 on substances depleting the ozone layer: No data.

Article 95, REGULATION (EU) NO 528/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL: 2-methylisothiazol-3(2H)-one (Group 6, 11, 12, 13); 1,2-benzisothiazol-3(2H)-one (Group 2, 6, 9, 11, 12, 13).

REGULATION (EU) No 649/2012, concerning the export and import of dangerous chemicals: No data available.

Regulation (EC) No. 648/2004 on detergents as amended:

According to this regulation the product meets the following criteria:

The surfactants contained in this mixture meet the biodegradability criterion of Regulation (EC) No. 648/2004 on detergents. Data that confirm this statement are at the disposal of the relevant authorities of the Member States and will be made available to them at the direct request or at the request of the manufacturer of cleaning products.

Content Labelling:

Component	Concentration range
Anionic surfactants	% (m/m) < 5
Non-ionic surfactants	% (m/m) < 5
Fragrances (Linalool, Limonene)	

Preservatives: 1,2-benzisothiazol-3(2H)-one (BENZISOTHIAZOLINONE), 2-methylisothiazol-3(2H)-one (METHYLISOTHIAZOLINONE).

Seveso III:

No data.

Restrictions on the sale and use of certain hazardous substances and mixtures (Annex XVII of REACH, etc ...):

They cannot be used in

- decorative articles intended to produce light or color effects by means of different phases, e.g. in decorative lamps and ashtrays,
- tricks and jokes,
- games intended for one or more participants, or articles intended to be used as such, even for decorative purposes.

Specific provisions for the protection of people or the environment:

It is recommended to use the information collected in this safety data sheet as a preliminary data to assess the local risk in order to take the necessary steps to prevent the risks associated with the handling, use, storage and disposal of this product.

Other regulations:

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.
- Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
- Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.
- Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.
- Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013.
- Government Statement of February 18, 2019 on the entry into force of amendments to Annexes A and B of the European Agreement on the International Carriage of Dangerous Goods by Road (ADR), drawn up in Geneva on September 30, 1957. (Journal of Laws of 2019, item 769).
- 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 thereto.
- 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).
- Regulation (EC) No 1336/2008 of the European Parliament and of the Council of 16 December 2008 amending Regulation (EC) No 648/2004 to adapt it to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (Official Journal EU L 354 of December 31 2008).

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

SECTION 16. OTHER INFORMATION

Provisions regarding the Safety Data Sheets:

This Safety Data Sheet was created in accordance with ANNEX II - Guidance for persons compiling Safety Data Sheets to Regulation (EC) No. 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Changes compared to the previous safety data sheet affecting risk management:

No data.

Texts of the regulation mentioned in section 2:

H319: Causes eye irritation.

Texts of the regulation mentioned in section 3:

These phrases do not refer to the product itself, they are for informational purposes only and refer to individual components mentioned in section 3 of the MSDS.

EC Regulation 1272/2008(CLP):

Acute Tox. 2: H330	Fatal if inhaled.
Acute Tox. 3: H301+ H311	Toxic if swallowed or in contact with skin.
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 eye irritation.
Skin Corr. 1B: H314	Causes serious skin burns and eye damage.
Skin Irrit. 2: H315	Causes skin irritation.
Skin Sens. 1A: H317	May cause an allergic skin reaction.
STOT SE 3: H335	May cause respiratory irritation.

Classification process:

Eye Irrit. 2: Calculation method.

Advice on staff training:

It is recommended that personnel who will handle this product receive basic safety training to help understand and interpret the MSDS and product label.

Main sources of literature:

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

Abbreviations used in the text:

Supp.Class.: Supplier Classification ADR: International Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association ICAO: International Civil Aviation Organization.
COD Chemical oxygen demand (COD).
BOD: Biochemical oxygen demand (BOD) within 5 days.
BCF: bioconcentration factor
Log POW: log POW: octanol/water partition coefficient.
NDS: maximum permissible concentration.
NDSCh: maximum Permissible Instantaneous Concentration.
EC50: effective concentration (the concentration of the component at which 50% of the organisms show an effect within a specified time)
LD50: medial lethal dose.
LC50: medial lethal concentration.
EC50: medial effective concentration.
PBT: the ability of toxic substances to bioaccumulate
vPvB: very high ability of toxic substances to bioaccumulate
IWO: personal protective measures
STP: sewage treatment plant.
Henry: the solubility of a given component in a solution depending on the partial pressure of that component above the solution
EC: EINECS and ELINCS number (see also EINECS and ELINCS)
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European Inventory of Notified Chemical Substances
CEN: European Committee for Standardization
STOT: Specific Target Organ Toxicity
Koc: the partition coefficient normalized to the content of organic carbon, determines the degree of absorption of organic substances in the soil.
DNEL: derived no-effect level
PNEC: predicted no-effect concentration
BDO: registration number from the Waste Database
UFI: unique identifier of the active form
IARC: International Agency for Research on Cancer

The information contained in the MSDS results from the current state of knowledge and experience in product handling. Data on this product is presented in order to comply with safety requirements, not to guarantee its specific properties.
The employer is obliged to inform all workers who have contact with the product about the hazards and personal protection measures specified in this Material Safety Data Sheet.
This Material Safety Data Sheet has been developed on the basis of the Material Safety Data Sheets of the components provided by the manufacturers, conducted research as well as the applicable regulations on hazardous substances and chemical preparations.
Before they start working with the product, the users should learn the Health and Safety regulations regarding handling chemicals, and in particular, undergo appropriate workplace training.

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