OX-VIRIN

Nº: FSOX10072 Date of compilation: 12/11/2024 Revised: 27/11/2024 Version: 26 (Replaced 25)

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

1.1 Product identifier: OX-VIRIN

Other means of identification:

UFI: MRVV-Q083-W00N-AECU

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

Relevant uses (Professional users): Biocide

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:

OX-CTA S.L.
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1.4 Emergency telephone number: Servicio Médico del Instituto Nacional de Toxicología: 91 562 04 20

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.

Acute Tox. 4: Acute toxicity, Category 4, H302+H312+H332
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Org. Perox. D: Organic peroxides, Category D, H242
Skin Corr. 1A: Skin corrosion, Category 1A, H314
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger

Hazard statements:

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Org. Perox. D: H242 - Heating may cause a fire.
Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.
STOT SE 3: H335 - May cause respiratory irritation.

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235: Keep cool.
P271+P260: To be used only in the open or in well ventilated areas. Do not breathe the dust/smoke/gas/mist/vapours/aerosol.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/face protection.
P391: Collect spillage.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

UFI: MRVV-Q083-W00N-AECU

2.3 Other hazards:

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SECTION 2: HAZARDS IDENTIFICATION (continued)

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

3.1 Substance:

Not relevant

3.2 Mixture:

Chemical description: Hydrogen peroxide and peroxyacetic acid mixture with acid(s), water and not more than 5% peroxyacetic acid

Components:

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

Identification	Chemical name/Classification		Concentration
CAS: 7722-84-1 EC: 231-765-0 Index: 008-003-00-9 REACH: 01-2119485845-22-XXXX	**Hydrogen peroxide solution**[1]	ATP CLP00	**20 - <50 %**
	Regulation 1272/2008	Acute Tox. 4: H302+H332; Ox. Liq. 1: H271; Skin Corr. 1A: H314 - Danger 	
CAS: 64-19-7 EC: 200-580-7 Index: 607-002-00-6 REACH: 01-2119475328-30-XXXX	**Acetic acid**[1]	ATP CLP00	**10 - <20 %**
	Regulation 1272/2008	Flam. Liq. 3: H226; Skin Corr. 1A: H314 - Danger 	
CAS: 79-21-0 EC: 201-186-8 Index: 607-094-00-8 REACH: 01-2119531330-56-XXXX	**peracetic acid**[1]	ATP CLP00	**5 - <10 %**
	Regulation 1272/2008	Acute Tox. 4: H302+H312+H332; Aquatic Acute 1: H400; Flam. Liq. 3: H226; Org. Perox. D: H242; Skin Corr. 1A: H314 - Danger 	

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

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

Other information:

Identification	Specific concentration limit
Hydrogen peroxide solution CAS: 7722-84-1 EC: 231-765-0	% (w/w) >=70: Ox. Liq. 1 - H271 50<= % (w/w) <70: Ox. Liq. 2 - H272 % (w/w) >=70: Skin Corr. 1A - H314 50<= % (w/w) <70: Skin Corr. 1B - H314 35<= % (w/w) <50: Skin Irrit. 2 - H315 % (w/w) >=8: Eye Dam. 1 - H318 5<= % (w/w) <8: Eye Irrit. 2 - H319 % (w/w) >=35: STOT SE 3 - H335
Acetic acid CAS: 64-19-7 EC: 200-580-7	% (w/w) >=90: Skin Corr. 1A - H314 25<= % (w/w) <90: Skin Corr. 1B - H314 10<= % (w/w) <25: Skin Irrit. 2 - H315 % (w/w) >=25: Eye Dam. 1 - H318 10<= % (w/w) <25: Eye Irrit. 2 - H319
peracetic acid CAS: 79-21-0 EC: 201-186-8	% (w/w) >=32: Org. Perox. D - H242 20<= % (w/w) <32: Org. Perox. E - H242 5<= % (w/w) <20: Org. Perox. F - H242 % (w/w) >=1: STOT SE 3 - H335

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

Identification	Acute toxicity		Genus
Hydrogen peroxide solution CAS: 7722-84-1 EC: 231-765-0	LD50 oral	1193 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation vapour	11 mg/L	Rat
peracetic acid CAS: 79-21-0 EC: 201-186-8	LD50 oral	500 mg/kg	
	LD50 dermal	1100 mg/kg	
	LC50 inhalation vapour	17,296 mg/L *	

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

*** Changes with regards to the previous version*

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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

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

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

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

By eye contact:

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

By ingestion/aspiration:

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

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

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

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

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

Unsuitable extinguishing media:

Water jet

5.2 Special hazards arising from the substance or mixture:

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

5.3 Advice for firefighters:

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

Additional provisions:

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

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

For emergency responders:

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

6.2 Environmental precautions:

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:

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

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. 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

AVOID ANY KIND OF HEATING. Devices and systems must comply with the essential safety and health requirements and, with the minimum requirements for improving the health and safety protection of workers. Consult section 10 for conditions and materials that should be avoided. KEEP ONLY IN ORIGINAL CONTAINER.

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.- Specific storage requirements

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5If there is evidence of expansion of the container, remove gases by using the appropriate degassing system, as long as this presents no additional risk to the person performing this operation. During this process, the measures included in section 8 must be followed, as must any other possible additional measures.

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.

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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):

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

Identification	Occupational exposure limits		
Acetic acid	IOELV (8h)	10 ppm	25 mg/m³
CAS: 64-19-7 EC: 200-580-7	IOELV (STEL)	20 ppm	50 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrogen peroxide solution	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 7722-84-1	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 231-765-0	Inhalation	Not relevant	3 mg/m³	Not relevant	1,4 mg/m³
Acetic acid	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 64-19-7	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 200-580-7	Inhalation	Not relevant	25 mg/m³	Not relevant	25 mg/m³
peracetic acid	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 79-21-0	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 201-186-8	Inhalation	0,56 mg/m³	0,56 mg/m³	0,56 mg/m³	0,56 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrogen peroxide solution	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 7722-84-1	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 231-765-0	Inhalation	Not relevant	1,93 mg/m³	Not relevant	0,21 mg/m³
Acetic acid	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 64-19-7	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 200-580-7	Inhalation	Not relevant	25 mg/m³	Not relevant	25 mg/m³
peracetic acid	Oral	1,25 mg/kg	Not relevant	1,25 mg/kg	Not relevant
CAS: 79-21-0	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 201-186-8	Inhalation	0,28 mg/m³	0,28 mg/m³	0,28 mg/m³	0,28 mg/m³

PNEC:

Identification				
Hydrogen peroxide solution	STP	4,66 mg/L	Fresh water	0,013 mg/L
CAS: 7722-84-1	Soil	0,002 mg/kg	Marine water	0,013 mg/L
EC: 231-765-0	Intermittent	0,014 mg/L	Sediment (Fresh water)	0,047 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,047 mg/kg
Acetic acid	STP	85 mg/L	Fresh water	3,058 mg/L
CAS: 64-19-7	Soil	0,47 mg/kg	Marine water	0,306 mg/L
EC: 200-580-7	Intermittent	30,58 mg/L	Sediment (Fresh water)	11,36 mg/kg
	Oral	Not relevant	Sediment (Marine water)	1,136 mg/kg
peracetic acid	STP	0,051 mg/L	Fresh water	0 mg/L
CAS: 79-21-0	Soil	0,32 mg/kg	Marine water	0 mg/L
EC: 201-186-8	Intermittent	0,002 mg/L	Sediment (Fresh water)	0 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0 mg/kg

8.2 Exposure controls:

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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours (Filter type: E)	CE CAT III	EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Viton®-Butyl, Breakthrough time: > 480 min, Thickness: 0.7 mm)	CE CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

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

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield	CE CAT II	EN 166:2002 UNE-EN ISO 18526-1 al 4:2020 UNE-EN ISO 18526-1 al 4:2020 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
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CE CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2005/A1:2011 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1995	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	CE CAT III	EN ISO 13287:2020 EN ISO 20345:2022 EN 13832-1:2019	Replace boots at any sign of deterioration.

F.- Additional emergency measures

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

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

Environmental exposure controls:

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

*** Changes with regards to the previous version*

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES **

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

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

Volatility:

Boiling point at atmospheric pressure:	111 ºC
Vapour pressure at 20 ºC:	1919 Pa
Vapour pressure at 50 ºC:	10141,09 Pa (10,14 kPa)
Evaporation rate at 20 ºC:	Not relevant *

Product description:

Density at 20 ºC:	1112,6 kg/m³
Relative density at 20 ºC:	1,113
Dynamic viscosity at 20 ºC:	1,03 mPa·s
Kinematic viscosity at 20 ºC:	0,93 mm²/s
Kinematic viscosity at 40 ºC:	Not relevant *
Concentration:	Not relevant *
pH:	0 - 1
Vapour density at 20 ºC:	Not relevant *
Partition coefficient n-octanol/water 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Not relevant *
Solubility properties:	Not relevant *
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

Flammability:

Flash Point:	48 ºC
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	427 ºC
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *

Particle characteristics:

Median equivalent diameter:	Not relevant *

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	H242 Heating may cause a fire.
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *

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

*** Changes with regards to the previous version*

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES ** (continued)

Other safety characteristics:

Surface tension at 20 ºC:	Not relevant *
Refraction index:	Not relevant *

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

*** Changes with regards to the previous version*

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

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

10.2 Chemical stability:

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

10.3 Possibility of hazardous reactions:

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

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Heating may cause a fire or explosion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Avoid direct impact	Avoid alkalines, heavy metals, reducing agents, peroxide accelerating agents

10.6 Hazardous decomposition products:

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

SECTION 11: TOXICOLOGICAL INFORMATION **

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

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

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: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

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

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

*** Changes with regards to the previous version*

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SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

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

E- Sensitizing effects:

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

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

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

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:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Hydrogen peroxide solution CAS: 7722-84-1 EC: 231-765-0	LD50 oral	1193 mg/kg	Rat
	LD50 dermal	4060 mg/kg	Rat
	LC50 inhalation vapour	11 mg/L	Rat
peracetic acid CAS: 79-21-0 EC: 201-186-8	LD50 oral	500 mg/kg	
	LD50 dermal	1100 mg/kg	
	LC50 inhalation mist	4,08 mg/L	Rat

11.2 Information on other hazards:

Endocrine disrupting properties

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

Other information

Not relevant

*** 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

Harmful to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

*** Changes with regards to the previous version*

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SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Identification	Concentration		Species	Genus
Hydrogen peroxide solution	LC50	16,4 mg/L (96 h)	Pimephales promelas	Fish
CAS: 7722-84-1	EC50	7,7 mg/L (24 h)	Daphnia magna	Crustacean
EC: 231-765-0	EC50	2,5 mg/L (72 h)	Chlorella vulgaris	Algae
Acetic acid	LC50	75 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 64-19-7	EC50	47 mg/L (24 h)	Daphnia magna	Crustacean
EC: 200-580-7	EC50	Not relevant		
peracetic acid	LC50	>0.1 - 1 mg/L (96 h)		Fish
CAS: 79-21-0	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
EC: 201-186-8	EC50	>0.1 - 1 mg/L (72 h)		Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Acetic acid	NOEC	57,2 mg/L	Oncorhynchus mykiss	Fish
CAS: 64-19-7 EC: 200-580-7	NOEC	80 mg/L	Daphnia magna	Crustacean
peracetic acid	NOEC	0,022 mg/L	Danio rerio	Fish
CAS: 79-21-0 EC: 201-186-8	NOEC	0,012 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Acetic acid	BOD5	Not relevant	Concentration	100 mg/L
CAS: 64-19-7	COD	Not relevant	Period	14 days
EC: 200-580-7	BOD5/COD	Not relevant	% Biodegradable	74 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Acetic acid	BCF	3
CAS: 64-19-7	Pow Log	-0.71
EC: 200-580-7	Potential	Low
peracetic acid	BCF	1
CAS: 79-21-0	Pow Log	-1.09
EC: 201-186-8	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Acetic acid	Koc	Not relevant	Henry	Not relevant
CAS: 64-19-7	Conclusion	Not relevant	Dry soil	Not relevant
EC: 200-580-7	Surface tension	2,699E-2 N/m (25 ºC)	Moist soil	Not relevant
peracetic acid	Koc	4	Henry	2,168E-1 Pa·m³/mol
CAS: 79-21-0	Conclusion	Very High	Dry soil	Not relevant
EC: 201-186-8	Surface tension	Not relevant	Moist soil	Not relevant

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

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

12.7 Other adverse effects:

Not described

*** Changes with regards to the previous version*

SECTION 13: DISPOSAL CONSIDERATIONS

- CONTINUED ON NEXT PAGE -

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
20 01 19*	Pesticides	Hazardous

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

HP14 Ecotoxic, HP3 Flammable, HP6 Acute Toxicity, HP8 Corrosive

Waste management (disposal and evaluation):

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

Regulations related to waste management:

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

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

SECTION 14: TRANSPORT INFORMATION **

Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:

14.1	**UN number or ID number:**	UN3149
14.2	**UN proper shipping name:**	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE STABILIZED
14.3	**Transport hazard class(es):**	5.1
	Labels:	5.1, 8
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Special regulations:	196, 553
	Tunnel restriction code:	E
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 41-22:

14.1	**UN number or ID number:**	UN3149
14.2	**UN proper shipping name:**	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE STABILIZED
14.3	**Transport hazard class(es):**	5.1
	Labels:	5.1, 8
14.4	**Packing group:**	II
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	Not relevant
	EmS Codes:	F-H, S-Q
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
	Segregation group:	SGG16
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

Transport of dangerous goods by air:

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 14: TRANSPORT INFORMATION ** (continued)

With regard to IATA/ICAO 2024:

14.1	**UN number or ID number:**	UN3149
14.2	**UN proper shipping name:**	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE STABILIZED
14.3	**Transport hazard class(es):**	5.1
	Labels:	5.1, 8
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

*** Changes with regards to the previous version*

SECTION 15: REGULATORY INFORMATION **

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

- Article 95, REGULATION (EU) No 528/2012: *Hydrogen peroxide solution (7722-84-1) - PT: (1,2,3,4,5,6)* ; *peracetic acid (79-21-0) - PT: (1,2,3,4,5,11,12)*
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) No 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

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

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors: Contains more than 12 % of Hydrogen peroxide solution by weight. These are not to be made available to, introduced, possessed or used by members of the general public unless their concentration is below specific limits. Product under the provisions of Article 9.
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.
Regulation (EU) 2019/1148 on the marketing and use of explosives precursors: Contains Hydrogen peroxide solution. Product under the provisions of Article 9. However, products that contain explosives precursors only to such a small extent and in such complex mixtures that the extraction of the explosives precursors is technically extremely difficult should be excluded from the scope of this Regulation.

Specific provisions in terms of protecting people or the environment:

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

Other legislation:

The product could be affected by sectorial legislation

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

*** Changes with regards to the previous version*

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.:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):
· New declared substances
Acetic acid (64-19-7)
Hydrogen peroxide solution (7722-84-1)
Information on basic physical and chemical properties (SECTION 9):
· Flash Point
TRANSPORT INFORMATION (SECTION 14):
· UN number
· Packing group
REGULATORY INFORMATION (SECTION 15):
· Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ….)

Texts of the legislative phrases mentioned in section 2:

H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.
H412: Harmful to aquatic life with long lasting effects.
H242: Heating may cause a fire.
H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled.

Texts of the legislative phrases mentioned in section 3:

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

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.
Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Org. Perox. D: H242 - Heating may cause a fire.
Ox. Liq. 1: H271 - May cause fire or explosion, strong oxidiser.
Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.

Advice related to training:

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

Principal bibliographical sources:

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

Abbreviations and acronyms:

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

- END OF SAFETY DATA SHEET -