

Signal Word: Attention

Hazards statements:

H318 It causes serious eye damage.

Precautionary statements:

P280 Wear eye protection and face.

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

P310 Immediately call a POISON CENTER or doctor/physician.

Contains: HYDROGEN PEROXIDE SOLUTION

2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/informatipon on ingredients.

3.1. Substances.

Information not relevant.

Identification	Conc. %	Classification 1272/2008 (CLP)
HYDROGEN PEROXIDE SOLUTION CAS. 7722-84-1 CE. 231-765-0 INDEX. 008-003-00-9	$10,5 \leq x < 12$	Ox. Liq. 1 H271, Acute Tox. 4 H302, Acute Tox. 4 H332, Skin Corr. 1A H314, STOT SE 3 H335.
Cetrimonium chloride CAS. 112-02-7 EC. 203-928-6 INDEX. -	$0,25 \leq x < 0,3$	Skin Corr. 1C H314, Aquatic Acute 1 H400 M=10
PHOSPHORIC ACID CAS. 7664-38-2 EC. 231-633-2 INDEX. 15-011-00-6	$0 \leq x < 0,05$	Skin Corr. 1B H314, Note B
MORPHOLINE CAS. 110-11-98 EC. 203-815-1 INDEX. 613-028-00-9	$0 \leq x < 0,05$	Flam. Liq. 3 H226, Acute Tox. 3 H311, Acute Tox. 4 H302, Acute Tox. 4 H332, Skin Corr. 1B H314

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide and chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water.

Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION

In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
GBR	United Kingdom	EH40/2005 Workplace exposure limits
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

HYDROGEN PEROXIDE SOLUTION

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
VLA	ESP	1,4	1		
WEL	GBR	1,4	1	2,8	2
TLV-ACGIH		1,4	1		

PHOSPHORIC ACID

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
VLA	ESP	1		2	
WEL	GBR	1		2	
TLV	ITA	1		2	
OEL	EU	1		2	
TLV-ACGIH		1		3	

MORPHOLINE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	36	10	72	20	
WEL	GBR	36	10	72	20	SKIN.
TLV	ITA	36	10	72	20	SKIN.
OEL	EU	36	10	72	20	
TLV-ACGIH		71	20			SKIN.

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protection equipment, ensure good ventilation in the workplace through effective local aspiration. The personal protective equipment must bear the CE marking attesting to their compliance with applicable regulations.

Provide emergency shower with visoculare pan.

HAND PROTECTION

Protect your hands with work gloves, category III (ref. Standard EN 374).

For the final choice of work glove material must be Considered: compatibility, degradation, breakage times and permeation.

In the case of preparations the resistance of protective gloves to chemicals Should be checked before use, as it expected. The gloves limit depends on the duration and use mode.

SKIN PROTECTION

Wear work clothes with long sleeves and safety footwear for professional use category I (ref. Directive 89/686 / EEC and standard EN ISO 20344).

Wash with soap and water after removing protective clothing.

EYE PROTECTION

You should wear protective airtight goggles (ref. Standard EN 166).

RESPIRATORY PROTECTION

In case of exceeding the threshold value (eg. TLV-TWA) of the substance or one or more of the substances present in the product, it is advisable to wear a mask with type B filter, the class (1, 2 or 3) must be chosen according to the limit concentration of use. (Ref. Standard EN 14387). In the case were present gas or of a different nature vapors and / or gases or vapors with particles (aerosols, fumes, mists, etc.) Should be provided for combined type filters. L'utilizzo of respiratory protective equipment is necessary in case the technical measures taken are not sufficient to limit l'esposizione the worker to the threshold values considered. The protection provided by masks is in any case limited.

In the case where the substance in question is odorless or its olfactory threshold is higher than the related TLV-TWA, and in case of emergency, wear a compressed air breathing apparatus open circuit (ref. Standard EN 137) or a respirator in socket d' outdoor air (ref. standard EN 138). For the correct choice of respiratory protection device, refer to EN 529.

ENVIRONMENTAL EXPOSUREONTROLS.

Emissions from production processes, including those from ventilation should be checked for compliance of environmental protection legislation.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	Cream
Colour	White
Odour	Characteristic
Odour threshold	Not available
pH	2,1-2,7
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	> 60°C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	Not available
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available

Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information.

Information not available.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

HYDROGEN PEROXIDE SOLUTION: decomposes rapidly with risk of explosion due to the effect of light, heat and contact with alkaline metals.

PHOSPHORIC ACID: decomposes at temperatures over 200°C/392°F.

MORPHOLINE: The product may react exothermically on contact with strong oxidizing agents or reducers, strong acids or bases.

10.2. Chemical stability.

Information not available.

10.3. Possibility of hazardous reactions.

The product may react violently with water.

PHOSPHORIC ACID: risk of explosion on contact with nitromethane. May react dangerously with alkalis and sodium borohydride.

10.4. Conditions to avoid.

Avoid overheating. Prevent moisture or water from penetrating inside the containers.

HYDROGEN PEROXIDE SOLUTION: exposure to light, heat and alkaline substances.

10.5. Incompatible materials.

HYDROGEN PEROXIDE SOLUTION: flammable substances, acetone, ethanol, glycerol, organic sulphides, hydrated bases, oxidisable materials, iron, copper, bronze, chromium, zinc, lead, silver, manganese and acetic acid.

PHOSPHORIC ACID: Metals, strong alkalis, aldehydes, sulphides and peroxides.

10.6. Hazardous decomposition products.

PHOSPHORIC ACID: phosphorus oxide.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product. The product causes serious eye injury and may cause corneal opacity, iris lesions, irreversible eye coloration.

HYDROGEN PEROXIDE SOLUTION

LD50 (Oral).1193 mg/kg Rat
at the concentration of 35%

PHOSPHORIC ACID

LD50 (Oral).1530 mg/kg Rat
LD50 (Dermal).2740 mg/kg Rabbit
LC50 (Inhalation).> 0,85 mg/l/1h Rat

MORPHOLINE

LD50 (Oral).1050 mg/kg Rat
LD50 (Dermal).500 mg/kg Rabbit
LC50 (Inhalation).35,1 mg/l/1h Rat

Cetrimonium chloride

LD50 (Oral).2700 mg/kg calculated
LD50 (Dermal).2100 mg/kg calculated

SECTION 12. Ecological information.

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

12.1. Toxicity.

Cetrimonium chloride

LC50 - for Fish. 0,7 mg/l/96h Brachydanio rerio

EC50 - for Algae / Aquatic Plants. 0,1 mg/l/72h

12.2. Persistence and degradability.

HYDROGEN PEROXIDE SOLUTION

Solubility in water. 100000 mg/l

Rapidly biodegradable.

PHOSPHORIC ACID

Solubility in water. > 850000 mg/l

Biodegradability: Information not available.

MORPHOLINE

Solubility in water. mg/l 1000 - 10000

12.3. Bioaccumulative potential.

HYDROGEN PEROXIDE SOLUTION

Partition coefficient: n-
octanol/water. -1,57

MORPHOLINE

Partition coefficient: n-
octanol/water. -2,55
BCF. < 0,65

12.4. Mobility in soil.

MORPHOLINE

Partition coefficient:
soil/water. -0,6196

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

Information not available.

SECTION 13. Disposal considerations.

13.1. Waste treatment methods.

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject ADR.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SEZIONE 14. Informazioni sul trasporto.

14.1. UN number.

ADR / RID, IMDG, 2984
IATA:

14.2. UN proper shipping name.

ADR / RID: PEROSSIDO DI
IDROGENO
IMDG: HYDROGEN
PEROXIDE,
AQUEOUS
IATA: HYDROGEN
PEROXIDE,
AQUEOUS

14.3. Transport hazard class(es).

ADR / RID: Class: 5.1 Label: 5.1
IMDG: Class: 5.1 Label: 5.1
IATA: Class: 5.1 Label: 5.1



14.4. Packing group..

ADR / RID, IMDG, III
IATA:

14.5. Environmental hazards.

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user.

ADR / RID:	HIN - Kemler: 50	Limited Amount: 5 L	Code Registration gallery: (E)
	Special provision: -		
IMDG:	EMS: F-H, S-Q	Limited Amount: 5 L	
IATA:	Cargo:	Quantity Maximum: 30 L	instructions packaging: 555
	Pass.:	Quantity Maximum: 2,5 L	instructions packaging: 551
	special instructions:	-	

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

SECTION 15. Regulatory information.

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

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.
None

Substances in Candidate List (Art. 59 REACH).
None

Substances subject to authorisation (Annex XIV REACH).
None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012
None

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Product not intended for uses provided for by Dir. 2004/42/CE.

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Ox. Liq. 1	Oxidising liquid, category 1
Acute Tox. 4	Acute toxicity, category 4
Acute Tox 3	Acute toxicity, category 3
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Flam Liq.3	Flammable liquid, category 3
Skin Corr.1A	Skin corrosion, category 1A
Skin Corr.1B	Skin corrosion, category 1B
Skin Corr.1C	Skin corrosion, category 1C
Eye Irrit.2	Eye irritation, category 2
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H319	May cause fire or explosion; strong oxidiser.
H302	Harmful if swallowed
H311	Toxic for contact with the skin
H271	It may cause fire or explosion; strong oxidiser
H226	Flammable liquid and vapor

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit

- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.