

## Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

### SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name OXYGEN

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

Intended use Product for purifying pools

Identified Uses	Industrial	Professional	Consumer
Chemicals for water treatment	PROC: 10, 11, 13, 19, 8a, 8b. PC: 37.	PROC: 10, 11, 13, 19, 8a, 8b. PC: 37.	-

#### Uses Advised Against

None known

#### 1.3. Details of the supplier of the safety data sheet

Name NEW PLAST SRL  
Full address VIA BRESCIA, 10/B  
District and Country 26010 POZZAGLIO (CR)  
IT  
tel. +39 0375 55066  
CCIAA 133770

e-mail address of the competent person responsible for the Safety Data Sheet

[info@poolmaster.it](mailto:info@poolmaster.it)

Product distribution by:

NEW PLAST SRL

#### 1.4. Emergency telephone number

For urgent inquiries refer to

Telefono d'emergenza 0375 55066

Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano) (H24)  
Centro Antiveleni di Pavia 0382 24444(CAV IRCCS Fondazione Maugeri-Pavia)  
Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti -Bergamo)  
Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze)  
Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma)  
Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I -Roma)  
Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli -Napoli)

### SECTION 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

# OXYGEN

**Hazard classification and indication:**

Acute toxicity, category 4	H302	Harmful if swallowed.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Hazardous to the aquatic environment, acute toxicity, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

## 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

**Hazard pictograms:****Signal words:**

Danger

**Hazard statements:**

<b>H302</b>	Harmful if swallowed.
<b>H318</b>	Causes serious eye damage.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H400</b>	Very toxic to aquatic life.
<b>H411</b>	Toxic to aquatic life with long lasting effects.

**Precautionary statements:**

<b>P101</b>	If medical advice is needed, have product container or label at hand.
<b>P102</b>	Keep out of reach of children.
<b>P273</b>	Avoid release to the environment.
<b>P280</b>	Wear protective gloves/ protective clothing / eye protection / face protection.
<b>P301+P310</b>	IF SWALLOWED: immediately call a POISON CENTER / doctor / . . .
<b>P303+P361+P353</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P312</b>	Contact a POISON WITH POISON / doctor if you feel unwell.
<b>P501</b>	Dispose of the product / container in accordance with local / regional / national / international regulations.

**Contains:** perossido di idrogeno  
Polimero di cloruro di N,N-dimetil-2-idrossipropil ammonio

## 2.3. Other hazards

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

**SECTION 3. Composition/information on ingredients****3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
<b>perossido di idrogeno</b>		
CAS 7722-84-1	$30 \leq x < 35$	Ox. Liq. 1 H271, Acute Tox. 4 H302, Acute Tox. 4 H332, Skin Corr. 1A H314, Eye Dam. 1 H318, STOT SE 3 H335, Aquatic Chronic 3 H412
EC 231-765-0		
INDEX 008-003-00-9		
Reg. no. 01-2119485845-22		
<b>Polimero di cloruro di N,N-dimetil-2-idrossipropil ammonio</b>		
CAS 25988-97-0	$2,5 \leq x < 5$	Acute Tox. 4 H302, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1
EC		
INDEX -		
Reg. no. POLIMERO		

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**

INGESTION: DO NOT induce vomiting. Consult a doctor immediately. Never give anything by mouth to an unconscious person or with cramps.  
 CONTACT WITH SKIN: wash the contaminated part with water and drain. If irritation persists or tissue damage occurs, consult a doctor if necessary.  
 CONTACT WITH EYES: remove contact lenses if present; wash the eyes with open eyelid with water. Consult a doctor.  
 INHALATION: Remove the injured person from the danger area in a well ventilated area; if symptoms of discomfort appear, seek medical assistance.

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

Harmful if swallowed. It causes serious skin burns and serious eye injuries.  
 For symptoms and effects due to the substances contained, 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 MEDIA: The extinguishing media are the traditional ones: carbon dioxide, foam and chemical powder. For leaks and spills of the product that have not ignited, the nebulized water can be used to disperse the flammable vapors and to protect the people involved in stopping the loss. NON-SUITABLE EXTINGUISHING MEDIA: Do not use water jets. Water is not effective for extinguishing the fire but it can be used to cool closed containers exposed to the flame, preventing bursts and explosions.

**5.2. Special hazards arising from the substance or mixture**

HAZARDS DUE TO EXPOSURE IN THE EVENT OF FIRE: Avoid breathing combustion products: carbon oxides.

**5.3. Advice for firefighters**

GENERAL INFORMATION: Cool the containers with water jets to avoid decomposition of the product and the development of substances potentially hazardous for health. Wear, if necessary, complete fire protection equipment. Collect extinguishing water that must not be discharged into drains. Dispose of the contaminated water used for the fire extinguisher and the residue according to the regulations in force. EQUIPMENT: Not necessary for small fires. If necessary, wear fire-fighting clothing such as a fireproof suit (EN469), fireproof gloves (EN659) and boots for firefighters (HO A29 or A30) depending on the amount of product and any other materials involved in the fire.

**SECTION 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Stop the leak if there is no danger. Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of the skin, eyes and personal clothing. These indications are valid both for workers involved in the work and for emergency interventions.

**6.2. Environmental precautions**

Prevent the product from entering sewers, surface waters, water tables.

**6.3. Methods and material for containment and cleaning up**

Vacuum the leaked product into a suitable container. Evaluate the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material. Ensure adequate ventilation of the area affected by the loss. Disposal of the contaminated material must be carried out in accordance with the provisions of point 13.

**6.4. Reference to other sections**

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

**SECTION 7. Handling and storage****7.1. Precautions for safe handling**

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

**7.2. Conditions for safe storage, including any incompatibilities**

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

**7.3. Specific end use(s)**

See the exposure scenarios attached to this safety datasheet.

**SECTION 8. Exposure controls/personal protection**

## OXYGEN

**8.1. Control parameters**

## Regulatory References:

EU OEL EU Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

**perossido di idrogeno****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
OEL	EU		1			
Predicted no-effect concentration - PNEC						
Normal value in fresh water				0,0126		mg/l
Normal value in marine water				0,0126		mg/l
Normal value for fresh water sediment				0,047		mg/kg
Normal value for marine water sediment				0,047		mg/kg
Normal value for water, intermittent release				0,0138		mg/l
Normal value of STP microorganisms				4,66		mg/l
Normal value for the terrestrial compartment				0,0023		mg/kg

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation	1,93 mg/m <sup>3</sup>	VND	0,21 mg/m <sup>3</sup>	VND	3 mg/m <sup>3</sup>	VND	1,4 mg/m <sup>3</sup>	VND

## Legend:

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

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

**8.2. Exposure controls**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

When choosing risk management measures and operating conditions, consult the exposure scenarios attached.

Provide an emergency shower with face and eye wash station.

**HAND PROTECTION**

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

Wear safety footwear for professional use of category III (ref. Directive 89/686 / EEC and standard EN ISO 20344) and anti-acid clothing for complete protection of the skin. Immediately replace contaminated clothing and wash them thoroughly before re-using them. Wash with soap and water after

removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a type FFP1 or higher class face mask if otherwise required by the risk assessment (see standard EN 149).

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

For information on controlling environmental exposure, see the exposure scenarios attached to this safety datasheet.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	colourless
Odour	pungent
Odour threshold	Not available
pH	3
Melting point / freezing point	Not available
Initial boiling point	> 95 °C
Boiling range	Not available
Flash point	Not applicable
Evaporation Rate	Not available
Flammability of solids and gases	not applicable
Lower inflammability limit	Not applicable
Upper inflammability limit	Not applicable
Lower explosive limit	Not applicable
Upper explosive limit	Not applicable
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,08 g/cm <sup>3</sup>
Solubility	soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available

**OXYGEN**

Decomposition temperature	Not available
Viscosity	<200 cps
Explosive properties	not applicable
Oxidising properties	not applicable

**9.2. Other information**

Information not available

**SECTION 10. Stability and reactivity**

In the absence of data relating to the preparation, the following information refers to the substances that make up the mixture.

**10.1. Reactivity**

Information not available

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions**

Information not available

**10.4. Conditions to avoid**

Information not available

**10.5. Incompatible materials**

Information not available

**10.6. Hazardous decomposition products**

Information not available

**SECTION 11. Toxicological information**

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.

**11.1. Information on toxicological effects**Metabolism, toxicokinetics, mechanism of action and other information

Information not available

## OXYGEN

### Information on likely routes of exposure

Information not available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

### Interactive effects

Information not available

### ACUTE TOXICITY

ATE (Inhalation) of the mixture:

> 20 mg/l

ATE (Oral) of the mixture:

1192,07 mg/kg

ATE (Dermal) of the mixture:

Not classified (no significant component)

Polimero di cloruro di N,N-dimetil-2-idrossipropil ammonio

LD50 (Oral) 1865 mg/kg Ratto

LD50 (Dermal) > 2000 mg/kg coniglio

perossido di idrogeno

LD50 (Oral) 431 mg/kg ratto

LD50 (Dermal) 6400 mg/kg coniglio

LC50 (Inhalation) > 0,17 mg/l/4h ratto

### SKIN CORROSION / IRRITATION

Causes skin irritation

### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class



CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

**SECTION 12. Ecological information**

This product is dangerous for the environment and highly toxic for aquatic organisms.

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

**12.1. Toxicity**

Polimero di cloruro di N,N-dimetil-2-

idrossipropil ammonio

LC50 - for Fish

0,077 mg/l/96h rainbow trout

EC50 - for Crustacea

0,084 mg/l/48h daphnia magna

EC50 - for Algae / Aquatic Plants

0,13 mg/l/72h alga verde

Chronic NOEC for Fish

0,024 mg/l trota iridea

Chronic NOEC for Crustacea

0,026 mg/l daphnia magna

Chronic NOEC for Algae / Aquatic Plants

0,032 mg/l alga verde

perossido di idrogeno

LC50 - for Fish

16,4 mg/l/96h Pimephales promelas

EC50 - for Crustacea

2,4 mg/l/48h Daphnia pulex

EC50 - for Algae / Aquatic Plants

2,6 mg/l/72h Skeletonema costatum

Chronic NOEC for Crustacea

0,63 mg/l Daphnia magna

**12.2. Persistence and degradability**

Polimero di cloruro di N,N-dimetil-2-

idrossipropil ammonio

NOT rapidly degradable

## OXYGEN

81% oecd tg301 28 d

perossido di idrogeno

Rapidly degradable

### 12.3. Bioaccumulative potential

Polimero di cloruro di N,N-dimetil-2-idrossipropil ammonio

Partition coefficient: n-octanol/water -3,13 21°C

perossido di idrogeno

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

### 12.4. Mobility in soil

Polimero di cloruro di N,N-dimetil-2-idrossipropil ammonio

Partition coefficient: soil/water > 4,7

perossido di idrogeno

Partition coefficient: soil/water 0,2

### 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  $\geq$  than 0,1%.

### 12.6. Other adverse effects

Information not available

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

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

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

## SECTION 14. Transport information

### 14.1. UN number

ADR / RID, IMDG, 2014

IATA:

# OXYGEN

## 14.2. UN proper shipping name

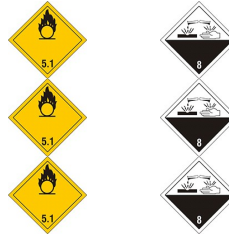
ADR / RID: HYDROGEN PEROXIDE, AQUEOUS SOLUTION  
 IMDG: HYDROGEN PEROXIDE, AQUEOUS SOLUTION  
 IATA: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

## 14.3. Transport hazard class(es)

ADR / RID: Class: 5.1 Label: 5.1 (8)

IMDG: Class: 5.1 Label: 5.1 (8)

IATA: Class: 5.1 Label: 5.1 (8)



## 14.4. Packing group

ADR / RID, IMDG, IATA: II

## 14.5. Environmental hazards

ADR / RID: NO  
 IMDG: NO  
 IATA: NO

## 14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 58	Limited Quantities: 1 L	Tunnel restriction code: (E)
IMDG:	Special provision: - EMS: F-H, S-Q	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 5 L	Packaging instructions: 554
	Pass.:	Maximum quantity: 1 L	Packaging instructions: 550
	Special provision:	-	

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

Information not relevant

## SECTION 15. Regulatory information

CODICE ISS (Azienda / preparato): 00466200359 / OX NP

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

Seveso Category - Directive 2012/18/EC: E1

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

### Product

Point 3

### Contained substance

Point 75 perossido di idrogeno  
Reg. no.: 01-  
2119485845-22

Regulation (EC) No. 2019/1148 - on the marketing and use of explosives precursors

#### Restricted explosives precursor

The acquisition, introduction, possession or use of that restricted explosives precursor by members of the general public is subject to a restriction as set out in Article 5(1) and (3). Restricted explosives precursors shall not be made available to, or introduced, possessed or used by members of the general public.

The acquisition, introduction, possession or use of that regulated explosives precursor by members of the general public is subject to reporting obligations as set out in Article 9.

All suspicious transactions and significant disappearances and thefts must be reported to the relevant national contact point.

#### Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

#### 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.

**15.2. Chemical safety assessment**

A chemical safety assessment has been performed for the following contained substances

perossido di idrogeno

**SECTION 16. Other information**

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

<b>Ox. Liq. 1</b>	Oxidising liquid, category 1
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Skin Corr. 1A</b>	Skin corrosion, category 1A
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H271</b>	May cause fire or explosion; strong oxidiser.
<b>H302</b>	Harmful if swallowed.
<b>H332</b>	Harmful if inhaled.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

Use descriptor system:

<b>PC</b>	<b>37</b>	Water treatment chemicals
<b>PROC</b>	<b>10</b>	Roller application or brushing
<b>PROC</b>	<b>11</b>	Non industrial spraying
<b>PROC</b>	<b>13</b>	Treatment of articles by dipping and pouring
<b>PROC</b>	<b>19</b>	Manual activities involving hand contact
<b>PROC</b>	<b>8a</b>	Transfer of substance or mixture (charging and discharging) at non- dedicated facilities
<b>PROC</b>	<b>8b</b>	Transfer of substance or mixture (charging and discharging) at dedicated facilities

**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

## OXYGEN

- 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 (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 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
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
  13. Regulation (EU) 2017/776 (X Atp. CLP)
  14. Regulation (EU) 2018/669 (XI Atp. CLP)
  15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
  16. Regulation (EU) 2019/521 (XII Atp. CLP)
- 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
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

### 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.

### CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

### Changes to previous review:

The following sections were modified:

02 / 03.

# OXYGEN

## Exposure Scenarios

Product	OXYGEN
Scenario Title	PEROSSIDO DI IDROGENO SOLUZIONE
Revision nr.	1
File	EN_5526_1.pdf