



1. DESCRIPTION

Trade Name: Hydrogen Peroxide (All grades)

Chemical Name: Hydrogen peroxide, dihydrogen dioxide, hydrogen dioxide, hydrogen oxide, oxydol, peroxide

Application: Bleaching agent, Oxidizing agent, Cosmetics, Water treatment

Supplier: TEAM Chemicals

Telephone: +44 (0)207 408 7700 - +98 912 3717539

Address: No. 43, Souri St., 43 Ashrafi Esfahani Expressway

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients

NAME	CAS RN	Proportion
Hydrogen Peroxide	7722-84-1	35-50%
Water	7732-18-5	50-65%

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

Skin corrosion produces an irreversible damage to the skin; Spillage and fire water can cause pollution of watercourses. Repeated or prolonged exposure to the substance can produce target organs damage.

Potential Acute Health Effects:

Inhalation: Cough, Dyspnea,

Skin contact: Irritant effects,

Eye contact: Conjunctivitis (pink eye), Risk of serious damage to eyes, Risk of blindness,

Ingestion: Nausea, Vomiting, Diarrhea, Vertigo, Spasms, Unconsciousness

Irritant YES **Flammable** NO

Carcinogenic NO **Oxidant** YES

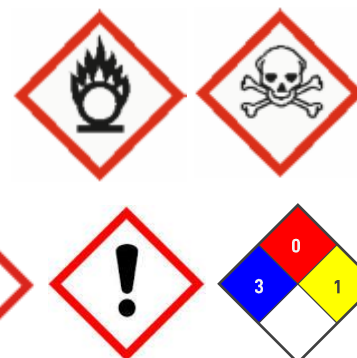
Explosive NO

Environmental Hazard NO

Corrosive YES

(Risk-Phrases) H272-H301-H314-H318-H332-H335-H412

(Safety-Phrases) -





4. FIRST AID MEASURES

Eye Contact: After contact with eye, wash immediately with plenty of water for 10 to 15 minutes. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Skin Contact: Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

Inhalation: Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Ingestion: call poison control center or medical physician immediately for treatment advice. Rinse mouth with water.

5. FIRE FIGHTING MEASURES

Flammable Properties: Non-flammable

Extinguishing Media: Water, Spray, Water fog

Fire Fighting: Explosive when mixed with combustible material

Fire/Explosion Hazard: Solutions above 50% are especially hazardous as they do not contain enough water to remove the heat of decomposition by evaporation.

Fire Incompatibility: Oxidizing property. The product itself does not burn.

Personal Protection: As in any fire, wear self-contained breathing apparatus pressure-demand

6. ACCIDENTAL RELEASE MEASURES

Small Spill:

- Clean up all spills immediately
- Wipe up. Absorb with liquid-binding material (sand, etc.)
- Keep people away from and upwind of spill/leak
- Do not touch damaged containers.
- Clean contaminated surface thoroughly

Large Spill:

Stop leak if without risk. Absorb with liquid-binding material (sand, etc.). Covering of drains are advised.

7. HANDLING AND STORAGE

HANDLING Precautions:

Handle and open container with care. Do not get this material in your eyes, on your skin, or on your clothing. Wear personal protective equipment. Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray.

Storage Precautions:

Use care in handling/storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid release to the environment. Refer to National Fire Protection Association (NFPA) 430, Code for the Storage of Solid and Liquid Oxidizers.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

US. ACGIH Threshold Limit Values
Time weighted average 1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
PEL: 1 ppm (1.4 mg/m³)

ENVIRONMENTAL EFFECTS: Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers. May be an aesthetic nuisance due to color.

PERSONAL PROTECTION

Use of protective coveralls and long sleeves is recommended.

Use of impervious boots are recommended.

Protective gloves.

If ventilation is not sufficient to effectively prevent buildup of aerosols or mists, appropriate NIOSH/MSHA respiratory protection must be provided.

ENGINEERING CONTROLS

Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits

9. PHYSICAL & CHEMICAL PROPERTIES

Physical state and appearance: Liquid

Color: colorless

Odor: pungent

pH (1% solution): 2-4 (20°C)

Melting/Freezing Point: -52°C

Flash Point: Not applicable

Specific Gravity: 1.196

Solubility: completely soluble with water

Vapor Pressure: 18 mmHg (68 °F (20 °C))

10. STABILITY & REACTIVITY

Chemical Stability: not reactive under normal ambient conditions.

Conditions to Avoid: Keep away from heat. Decomposition takes place from temperatures above: >100 °C.

Materials to Avoid: acids, lead, iron, copper, bronze, brass, silver, zinc, chromium

Special Remarks on Reactivity: Hazardous combustion products.

Special Remarks on Corrosivity: -

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral: Toxic if swallowed. (Rat) LD50 = 225 - 1,200 mg/kg. (50 %) (as aqueous solution)

Dermal: Practically nontoxic. (Rat) LD50 = 9,200 mg/kg. (70 %) (as aqueous solution)

Inhalation: No deaths occurred. (Rat) 4 h LC0 > 0.17 mg/L. (50 %) (saturated vapor)

Skin corrosion/irritation Causes severe skin burns. (Rabbit) (1 h) (50 %) (aqueous solution)

Serious eye damage/eye irritation Causes serious eye damage.



12. ECOLOGICAL INFORMATION

Product information:

Aquatic toxicity (acute) of components of the mixture

LC50= 16.4 mg/l (fish-96 h)

ErC50=1.38 mg/l (algae-72 h)

Aquatic toxicity (chronic) of components of the mixture

EC50= 466 mg/l (microorganisms-30 min)

Biodegradation

The methods for determining the biological degradability are not applicable to inorganic substances.

13. DISPOSAL CONSIDERATION

DISPOSAL METHODS:

Dispose of waste material according to Local, State, and Provincial Environmental Regulations. Do not empty into drains. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

14. TRANSPORT INFORMATION

U.S. DOT Shipping Description:

14.1 UN number

ADR : UN 2014

IMDG-Code : UN 2014

14.2 Proper shipping name

ADR : HYDROGEN PEROXIDE, AQUEOUS S

IMDG-Code : HYPOCHLORITE SOLUTION

14.3 Transport hazard class

ADR : 5.1 (8)

IMDG-Code : 5.1 (8)

14.4 Packing group

ADR/RID/AND II

IMDG-Code II

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.



Material Safety Datasheet

HYDROGEN PEROXODE

15. REGULATORY INFORMATION

EU. EINECS	EINECS	Conformity
US. Toxic Substances Control Act	TSCA	The components of this product are all on the TSCA Inventory.
Australia. Industrial Chemical (Notification and Assessment) Act	AICS	Conforms
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	AICS	Conforms
Japan. Kashin-Hou Law List	ENCS (JP)	Does not conform
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	PICCS (PH)	Does not conform
China. Inventory of Existing Chemical Substances	IECSC(CN)	Does not conform

16. ADDITIONAL INFORMATION

Reason(s) for Issue:

3 Yearly Revised Primary MSDS
Update in Toxicological Information
Update in Ecological Information

List of relevant phrases:

H272 May intensify fire; oxidizer.
H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

This MSDS summaries to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. TEAM cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.