

SAFETY DATA SHEET

Version 8.2
Revision Date 04/29/2021
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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name : Hydrogen peroxide 30% Suprapur®

Product Number : 1.07298

Catalogue No. : 107298

Brand : Millipore

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

Identified uses : Reagent for analysis

1.3 Details of the supplier of the safety data sheet

Company : EMD Millipore Corporation
400 Summit Drive
BURLINGTON MA 01803
UNITED STATES OF AMERICA (THE)

Telephone : +1 800-645-5476

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-
527-3887 CHEMTREC (International) 24
Hours/day; 7 Days/week

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute toxicity, Oral (Category 4), H302

Serious eye damage (Category 1), H318

Short-term (acute) aquatic hazard (Category 2), H401

Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H302

H318

H401

Harmful if swallowed.

Causes serious eye damage.

Toxic to aquatic life.

H412	Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear eye protection/ face protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component		Classification	Concentration
Hydrogen Peroxide			
CAS-No.	7722-84-1	Ox. Liq. 1; Acute Tox. 4; Skin Corr. 1A; Eye Dam. 1; STOT SE 3; Aquatic Acute 2; Aquatic Chronic 3; H271, H302, H332, H314, H318, H335, H401, H412 Concentration limits: ≥ 70 %: Ox. Liq. 1, H271; 50 - < 70 %: Ox. Liq. 2, H272; ≥ 70 %: Skin Corr. 1A, H314; 50 - < 70 %: Skin Corr. 1B, H314; 35 - < 50 %: Skin Irrit. 2, H315; 8 - < 50 %: Eye Dam. 1, H318; 5 - < 8 %: Eye Irrit. 2, H319; ≥ 35 %: STOT SE 3, H335;	≥ 30 - < 35 %
EC-No.	231-765-0		
Index-No.	008-003-00-9		

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.
Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

Not combustible.

Ambient fire may liberate hazardous vapours.

Has a fire-promoting effect due to release of oxygen.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not empty into drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralising material (e.g. Chemizorb® H⁺, Merck Art. No. 101595). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

No metal containers. Close containers in such a way to enable internal pressure to escape (e.g. excess pressure valve).

Tightly closed. Protected from light. Do not store near combustible materials.

Recommended storage temperature see product label.

Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Hydrogen Peroxide	7722-84-1	TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Confirmed animal carcinogen with unknown relevance to humans		
		TWA	1 ppm 1.4 mg/m ³	USA. NIOSH Recommended Exposure Limits
		TWA	1 ppm 1.4 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		PEL	1 ppm 1.4 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

8.2 Exposure controls

Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Latex gloves

Minimum layer thickness: 0.6 mm

Break through time: 480 min

Material tested: Lapren® (KCL 706 / Aldrich Z677558, Size M)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatrill® L

Body Protection

protective clothing

Respiratory protection

required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not empty into drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|--|---|
| a) Appearance | Form: liquid
Color: colorless |
| b) Odor | slight |
| c) Odor Threshold | No data available |
| d) pH | 2 - 4 at 20 °C (68 °F) |
| e) Melting point/freezing point | Melting point: -26 °C (-15 °F) at 1,013 hPa |
| f) Initial boiling point and boiling range | 107 °C 225 °F at 1,013 hPa |
| g) Flash point | No data available |
| h) Evaporation rate | No data available |

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i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor pressure	ca.18 hPa at 20 °C (68 °F)
l)	Vapor density	No data available
m)	Relative density	No data available
n)	Water solubility	soluble
o)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition temperature	No data available
q)	Decomposition temperature	> 100 °C (> 212 °F) -
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	Oxidizing potential

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Has a fire-promoting effect due to release of oxygen.

10.2 Chemical stability

heat-sensitive Sensitivity to light

10.3 Possibility of hazardous reactions

Risk of explosion with:

Acetaldehyde

Acetone

Activated charcoal

Alcohols

formic acid

Ammonia

combustible substances

vinyl acetate

Organic Substances

Powdered metals

Dust

hydrazine and derivatives

hydrides

Ether

Potassium

anilines

Metallic salts

acetic acid
Acetic anhydride
Formaldehyde
furfuryl alcohol
oils
sodium
Lithium
lithium aluminium hydride
organic solvents
Magnesium
metallic oxides
Methanol
Reducing agents
Oxides of phosphorus
butanol
with
Sulphuric acid
alkali hydroxides
with
Heavy metals
Exothermic reaction with:
alkali hydroxides
antimony sulfide
tin (II) chloride
Sulfides
3-BROMO-5-CHLORO-4-HYDROXYBENZALDEHYDE
nitric acid (conc.)
ethanol
glycerol
Potassium hydroxide
phosphorus
metallic oxides
Sodium hydroxide
Aldehydes
nonmetals
nonmetallic oxides
strong alkalis
Amines
Acids
Oxidizing agents
alkali salts
Alkali metals
Alkaline earth metals
iodides
peroxi compounds
Brass
organic nitro compounds
phenol
with
metal catalysts
Risk of ignition or formation of inflammable gases or vapours with:
potassium permanganate
Wood/Sawdust
vinyl acetate
with

Catalyst

10.4 Conditions to avoid

Heating.

10.5 Incompatible materials

Metals

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Acute toxicity estimate Oral - 1,667 mg/kg
(Calculation method)

Acute toxicity estimate Inhalation - 4 h - 36.67 mg/l
(Calculation method)

Acute toxicity estimate Dermal - > 5,000 mg/kg
(Calculation method)
No data available

Skin corrosion/irritation

After long-term exposure to the chemical: Causes skin burns.

Serious eye damage/eye irritation

conjunctivitis

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

No data available

Aspiration hazard

No data available

11.2 Additional Information

Not available

Dizziness

Unconsciousness

Diarrhea

Nausea

Vomiting

Headache

Convulsions

muscle twitching

insomnia

shock

Irritation and corrosion

conjunctivitis

Risk of serious damage to eyes.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Components**Hydrogen Peroxide****Acute toxicity**

Acute toxicity estimate Oral - 500.1 mg/kg

(Expert judgment)

No data available

Inhalation: Corrosive to respiratory system.

LD50 Dermal - Rabbit - male and female - > 2,000 mg/kg
(US-EPA)

Skin corrosion/irritation**Serious eye damage/eye irritation**

Causes serious eye damage.

Respiratory or skin sensitization**Germ cell mutagenicity**

OECD Test Guideline 474

Mouse - male and female - Bone marrow

Result: negative

Carcinogenicity

Reproductive toxicity

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. - Respiratory Tract

Specific target organ toxicity - repeated exposure

Aspiration hazard

SECTION 12: Ecological information

12.1 Toxicity

Mixture

No data available

12.2 Persistence and degradability

Biodegradability Remarks: No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No interference with wastewater treatment plants are to be expected when used properly.

Discharge into the environment must be avoided.

No data available

Components

Hydrogen Peroxide

Toxicity to fish	semi-static test LC50 - Pimephales promelas (fathead minnow) - 16.4 mg/l - 96 h (US-EPA)
	semi-static test NOEC - Pimephales promelas (fathead minnow) - 5 mg/l - 96 h (US-EPA)
Toxicity to daphnia and other aquatic invertebrates	semi-static test LC50 - Daphnia pulex (Water flea) - 2.4 mg/l - 48 h (US-EPA)
	semi-static test NOEC - Daphnia pulex (Water flea) - 1 mg/l - 48 h (US-EPA)
Toxicity to algae	IC50 - Pseudokirchneriella subcapitata (green algae) - 5.7 mg/l - 72 h Remarks: (ECOTOX Database)

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Growth rate NOEC - Skeletonema costatum (marine diatom) -
0.63 mg/l - 72 h
Remarks: (External MSDS)

Toxicity to bacteria static test EC50 - activated sludge - 466 mg/l - 30 min
(OECD Test Guideline 209)

static test EC50 - activated sludge - > 1,000 mg/l - 3 h
(OECD Test Guideline 209)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

DOT (US)

UN number: 2014 Class: 5.1 (8) Packing group: II
Proper shipping name: Hydrogen peroxide, aqueous solutions
Reportable Quantity (RQ):
Poison Inhalation Hazard: No

IMDG

UN number: 2014 Class: 5.1 (8) Packing group: II EMS-No: F-H, S-Q
Proper shipping name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

IATA

UN number: 2014 Class: 5.1 (8) Packing group: II
Proper shipping name: Hydrogen peroxide, aqueous solution

SECTION 15: Regulatory information

SARA 302 Components

Hydrogen Peroxide	CAS-No. 7722-84-1	Revision Date 2014-05-05
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SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

SECTION 16: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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