

SAFETY DATA SHEET

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

Product Name: Hydrogen peroxide aqueous solution

CAS: 7722-84-1

Application: Laboratory chemicals, Manufacture of substances

Manufacturer: Sinopharm Chemical Reagent Co., Ltd. No. 52 Ning Bo Road, Shanghai 200002, China

Fax: 86-021-6321403

Emergency Telephone: 86-0532-83889090 Email: sj_zjzx@sinopharm.com Website: http://www.reagent.com.cn

MSDS No: SCRC CSDS7722-84-1 Hydrogen peroxide aqueous solution

2. Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Oxidizing liquids (Category 1)Skin corrosion/irritation (Category 1)Serious eye damage/eye irritation (Category 1)Specific target organ toxicity - single exposure (Category 3), Respiratory system

Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram







Signal word: Danger

Hazard statement(s):H271 May cause fire or explosion; strong oxidizer.H314 Causes severe skin burns and eye damage.H335 May cause respiratory irritation.

Precautionary statement(s):

P210 Keep away from heat. P221 Take any precaution to avoid mixing with combustibles. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash skin thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/faceprotection.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable forbreathing. Immediately call a POISON CENTER/doctor. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Removecontact lenses, if present and easy to do. Continue rinsing. Immediatelycall a POISON CENTER/doctor. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam toextinguish. P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fireremotely due to the risk of explosion.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/ container to an approved waste disposal plant

Other hazards

none

3. Composition/information on ingredients

Substance/Mixture: 混合物

Component	CAS RN	Concentration
Hydrogen peroxide aqueous solution	7722-84-1	27. 5-60
水	7732-18-5	

4. First aid measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult aphysician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 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

 $Indication \ of \ any \ immediate \ medical \ attention \ and \ special \ treatment \ needed$

no data available

5. Firefighting measures

Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Special hazards arising from the substance or mixture

no data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into theenvironment must be avoided.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closedcontainers for disposal.

Reference to other sections

For disposal see section 13.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which areopened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature 2 - 8 $^{\circ}$ C

Specific end use(s)

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

8. Exposure controls/personal protection

Control parameters

Components with workplace control parameters

MAC: PC-STEL: TLV-TWA: 1ppm PC-TWA: 1.5

TLV-C: No data available TLV-STEL: No data available

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and atthe end of workday.

Personal protective equipment

Eve/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection testedand approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator withmulti-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup toengineering controls. If the respirator is the sole means of protection, use a full-face supplied airrespirator. Use respirators and components tested and approved under appropriate governmentstandards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. Physical and chemical properties

Information on basic physical and chemical properties

a) Appearance b) Odour c) Odour Threshold d) pH

e) Melting point/freezing point

f) Initial boiling point and boiling range

g) Flash point h) Evapouration rate

k) Vapour pressure

i) Flammability (solid, gas)j) Upper/lower flammability or explosive limits

Form: liquid, clearColour: colourless

No data available No data available 2-4 (H20, 20°C) -33to-26℃ 108°C/760mmHg 224.6°F/107°C No data available No data available No data available No data available

0.67 (30℃)

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1) Vapour density

m) Relative density

n) Water solubility

o) Partition coefficient:noctanol/water

p) Auto-ignition temperature

q) Decomposition temperature

r) Viscosity

s) Explosive properties

t) Oxidizing properties

No data available

 ρ (20) 1. 1008g/mL (27. 5%) 、 1. 107–1. 115g/mL (29–31%) 、 1. 132g/mL (35%) 、 1. 153g/mL (40%) 、 1. 1958g/mL (50%) 、

1. 218g/mL (55%) 、1. 240g/mL (60%)

No data available

-1.36

No data available

No data available

NA

No data available

The substance or mixture is not classified as oxidizing

Other safety information

No data available.

10. Stability and reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions. Contains the following stabiliser(s): Proprietary Inhibitor (<0.1 %)

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products notknown. Other decomposition products - No data availableIn the event of fire: see section 5

11. Toxicological information

Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not availableTo the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughlyinvestigated.

$12. \ \, {\it Ecological information}$

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Other adverse effects

Harmful to aquatic life with long lasting effects

13. Disposal considerations

Waste treatment methods

ProductOffer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging

Dispose of as unused product.

14. Transport information

UN number

ADR/RID:2014 IMDG:2014 IATA: 2014

UN proper shipping name

ADR/RID: HYDROGEN PEROXIDE, AQUEOUS

IMDG:HYDROGEN PEROXIDE, AQUEOUS SOLUTION IATA:HYDROGEN PEROXIDE, AQUEOUS SOLUTION SOLUTION

Transport hazard class(es)

ADR/RID: 5.1(8) IMDG: 5.1(8) IATA: 5.1(8)

Packaging group

ADR/RID:II IMDG:II IATA:II

Environmental hazards

ADR/RID:no IMDG:no IATA:no

Special precautions for user

no data available

15. Regulatory information

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture No data available

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H271 May cause fire or explosion; strong oxidizer. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation.

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. Sinopharm Chemical Reagent Co., Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.