

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Version: 1.2

Date of issue: 02/17/2014 Revision date: 07/12/2017 Supersedes: 07/12/2017

SECTION 1: Identification

Identification

Product form : Substance

Substance name : Hydrogen Peroxide, 30% w/w Chemical name : hydrogen peroxide solution ... %

CAS-No. : 7722-84-1 Product code : LC15430

Recommended use and restrictions on use 1.2.

: For laboratory and manufacturing use only. Use of the substance/mixture

: Laboratory chemicals Recommended use

: Not for food, drug or household use Restrictions on use

1.3. **Supplier**

LabChem Inc

Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court

Zelienople, PA 16063 - USA T 412-826-5230 - F 724-473-0647 info@labchem.com - www.labchem.com

Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazard(s) identification

Classification of the substance or mixture 2.1.

GHS-US classification

Oxidizing liquids Category H271 May cause fire or explosion; strong oxidizer

Acute toxicity (oral)

Harmful if swallowed H302 Category 4

Acute toxicity (inhalation) H332 Harmful if inhaled Category 4

Skin corrosion/irritation H314

Causes severe skin burns and eye damage

Category 1A

Full text of H statements : see section 16

GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)





GHS03

GHS05

GHS07

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H271 - May cause fire or explosion; strong oxidizer

H302+H332 - Harmful if swallowed or if inhaled H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) : P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking

P220 - Keep/Store away from clothing, combustible materials

P260 - Do not breathe mist, vapors, spray

P264 - Wash exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves, protective clothing, eye protection, face protection

P283 - Wear fire/flame resistant/retardant clothing

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

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lenses, if present and easy to do. Continue rinsing

P306+P360 - If on clothing: Rinse immediately contaminated clothing and skin with plenty of

water before removing clothes

P310 - Immediately call a poison center or doctor/physician

P363 - Wash contaminated clothing before reuse

P370+P378 - In case of fire: Use carbon dioxide (CO2), powder, alcohol-resistant foam to

extinguish

P371+P380+P375 - In case of major fire and large quantities: Evacuate area. Fight fire

remotely due to the risk of explosion

P405 - Store locked up

P501 - Dispose of contents/container to comply with local, state and federal regulations

If inhaled: Remove person to fresh air and keep comfortable for breathing

2.3. Other hazards which do not result in classification

Other hazards not contributing to the

: None under normal conditions.

classification

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Multi-constituent

Name : Hydrogen Peroxide, 30% w/w

CAS-No. : 7722-84-1

Name	Product identifier	%	GHS-US classification
Water	(CAS-No.) 7732-18-5	65 - 70	Not classified
Hydrogen Peroxide	(CAS-No.) 7722-84-1	30 - 35	Ox. Liq. 1, H271 Skin Corr. 1B, H314 Eye Dam. 1, H318

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately

call a poison center or doctor/physician.

First-aid measures after skin contact : IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water

before removing clothes. Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Immediately call a poison center or doctor/physician.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Immediately call a poison center or doctor/physician.

: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

First-aid measures after ingestion

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : May cause fire or explosion; strong oxidizer.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of

burns and injuries.

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Reactivity : Thermal decomposition generates : Corrosive vapors.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment. In case of major fire and

large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No naked lights. No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Protective goggles. Protective clothing. Gloves.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation

smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Take any precaution to avoid mixing with Combustibles. Do not breathe mist, vapors,

spray. Avoid contact during pregnancy/while nursing.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after

handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Comply with

applicable regulations.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : combustible

materials, Heat sources, Ignition sources, incompatible materials, Direct sunlight. Keep

container closed when not in use. Keep in fireproof place.

Incompatible products : Strong bases. Strong acids. Strong reducing agents. combustible materials.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources. Combustible material.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrogen Peroxide, 30% w/w (7722-84-1)		
ACGIH	ACGIH TWA (mg/m³)	1.4 mg/m³
ACGIH	ACGIH TWA (ppm)	1 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	1.4 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	1 ppm
IDLH	US IDLH (ppm)	75 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	1.4 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	1 ppm

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Hydrogen Peroxide (7722-84-1)			
ACGIH	ACGIH TWA (mg/m³)	1.4 mg/m ³	
ACGIH	ACGIH TWA (ppm)	1 ppm	
OSHA	OSHA PEL (TWA) (mg/m³)	1.4 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	1 ppm	
IDLH	US IDLH (ppm)	75 ppm	
NIOSH	NIOSH REL (TWA) (mg/m³)	1.4 mg/m³	
NIOSH	NIOSH REL (TWA) (ppm)	1 ppm	
Water (7732-18-5)			
Not applicable			

Not applicable

Appropriate engineering controls

Appropriate engineering controls

: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.

Individual protection measures/Personal protective equipment

Personal protective equipment:

Chemical resistant apron. Wear fire/flame resistant/retardant clothing. Face shield. Gloves. Protective clothing. Safety glasses.









Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or face shield

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Gas mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid : Colorless Color Odor : characteristic Odor threshold : No data available рΗ : No data available Melting point : -0.41 ℃

: No data available Freezing point

: 150.2 ℃ Boiling point

Flash point : No data available Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Non flammable. Vapor pressure : No data available

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Relative vapor density at 20 °C : No data available Relative density : No data available Specific gravity / density : 1.41 g/cm³

Solubility : Soluble in water. Soluble in ether. Soluble in ethanol.

Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : No data available
Explosive properties : No data available

Oxidizing properties : May cause fire or explosion; strong oxidizer.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapors.

10.2. Chemical stability

Unstable on exposure to light. May cause fire or explosion; strong oxidizer.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Overheating. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases. combustible materials. Strong reducing agents.

10.6. Hazardous decomposition products

oxygen. Thermal decomposition generates: Corrosive vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact; Inhalation

Acute toxicity : Oral: Harmful if swallowed. Inhalation: Harmful if inhaled.

Hydrogen Peroxide, 30% w/w (7722-84-1)		
ATE US (oral)	500 mg/kg body weight	
ATE US (gases)	4500 ppmV/4h	
ATE US (vapors)	11 mg/l/4h	
ATE US (dust, mist)	1.5 mg/l/4h	

Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg
ATE US (oral)	90000 mg/kg body weight
Skin corrosion/irritation	: Causes severe skin burns and eye damage.

Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified : Not classified

Hydrogen Peroxide, 30% w/w (22-84-1)	
IARC group	3 - Not classifiable	
Hydrogen Peroxide (7722-84-1)		
IARC group	3 - Not classifiable	

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Reproductive toxicity : Not classified Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated

exposure

: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Hydrogen Peroxide, 30% W/W (7722-84-1	
Persistence and degradability	Not established.
Water (7732-18-5)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Hydrogen Peroxide, 30% w/w (7722-84-1)		
Bioaccumulative potential	Not established.	
Water (7732-18-5)		
Water (1132-10-3)		

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to comply with local, state and federal regulations.

Additional information : Hazardous waste due to potential risk of explosion.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN2014 Hydrogen peroxide, aqueous solutions (with not less than 20 percent but not more

than 40 percent hydrogen peroxide (stabilized as necessary)), 5.1, II

UN-No.(DOT) : UN2014

Proper Shipping Name (DOT) : Hydrogen peroxide, aqueous solutions

with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as

necessary)

Transport hazard class(es) (DOT) : 5.1 - Class 5.1 - Oxidizer 49 CFR 173.128

Packing group (DOT) : II - Medium Danger

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Hazard labels (DOT) : 5.1 - Oxidizer

8 - Corrosive





DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Special Provisions (49 CFR 172.102)

: 243

A2 - Single packaging are not permitted on aircraft.

A3 - For combination packaging, if glass inner packaging (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packaging.

A6 - For combination packaging, if plastic inner packaging are used, they must be packed in tightly closed metal receptacles before packing in outer packaging.

B53 - Packaging must be made of either aluminum or steel.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

IP5 - IBCs must have a device to allow venting. The inlet to the venting device must be located in the vapor space of the IBC under maximum filling conditions.

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP6 - The tank must be equipped with a pressure release device which prevent a tank from bursting under fire engulfment conditions (the conditions prescribed in CGA pamphlet S1.2 (see 171.7 of this subchapter) or alternative conditions approved by the Associate Administrator may be used to consider the fire engulfment condition), taking into account the properties of the hazardous material to be transported.

TP24 - The portable tank may be fitted with a device to prevent the build up of excess pressure due to the slow decomposition of the hazardous material being transported. The device must be in the vapor space when the tank is filled under maximum filling conditions. This device must also prevent an unacceptable amount of leakage of liquid in the case of overturning.

TP37 - IM portable tanks are only authorized for the shipment of hydrogen peroxide solutions in water containing 72% or less hydrogen peroxide by weight. Pressure relief devices shall be designed to prevent the entry of foreign matter, the leakage of liquid and the development of any dangerous excess pressure. In addition, the portable tank must be designed so that internal surfaces may be effectively cleaned and passivated. Each tank must be equipped with pressure relief devices conforming to the following requirements: Total Concentration of hydrogen per peroxide solution \1\ 52% or less 11 Over 52%, but not greater than 60%22 Over 60%, but not greater than 72%32 \1\ Total venting capacity in standard cubic feet hour (S.C.F.H.) per pound of hydrogen peroxide solution.

DOT Packaging Exceptions (49 CFR 173.xxx) : None DOT Quantity Limitations Passenger aircraft/rail : 1 L (49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 5 L

CFR 175.75)

: D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel **DOT Vessel Stowage Location** carrying a number of passengers limited to not more than the larger of 25 passengers or one

passenger per each 3 m of overall vessel length, but the material is prohibited on passenger

vessels in which the limiting number of passengers is exceeded.

: 25 - Shade from radiant heat,66 - Stow "separated from" flammable solids,75 - Stow **DOT Vessel Stowage Other**

'separated from" permanganates

Other information : No supplementary information available.

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SECTION 15: Regulatory information

15.1. US Federal regulations

Hydrogen Peroxide, 30% w/w (7722-84-1)	
Listed on the United States TSCA (Toxic Substances Control Act) in Not subject to reporing requirements of the United States SARA Se	,
SARA Section 311/312 Hazard Classes	Reactive hazard Immediate (acute) health hazard

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Hydrogen Peroxide (7722-84-1)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

NFPA specific hazard

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 07/12/2017 Other information : None.

Full text of H-phrases: see section 16:

i text of firpiliases, see sec	5001 10.
H271	May cause fire or explosion; strong oxidizer
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled

NFPA health hazard

: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard

: 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

: 3 - Materials that in themselves are capable of detonation or explosive decomposition or explosive reaction but that require a strong initiating source or must be heated under confinement before initiation.

: OX - Materials that posses oxidizing properties.

3 OX 3

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Hazard Rating	Haza	ard	Rati	inc
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Flammability

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids,

solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 3 Serious Hazard - Materials that may form explosive mixtures with water and are capable of detonation or explosive reaction in the presence of a strong initiating source. Materials may

polymerize, decompose, self-react, or undergo other chemical change at normal temperature

and pressure with moderate risk of explosion

Personal protection : H

H - Splash goggles, Gloves, Synthetic apron, Vapor respirator

SDS US LabChem

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