

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Hydrogen Peroxide 12% Solution
CAS number	7722-84-1
Synonyms	N/A

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

Identified uses	Laboratory chemicals.
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Oxidizing Liquids	Category 3
Acute Toxicity	Category 4
Serious Eye Damage	Category 1
Specific Target Organ Toxicity (single exposure)	Category 3
Target Organ(s) - Respiratory system	

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

May intensify fire; oxidizer.
Harmful if swallowed.
Causes serious eye damage.
May cause respiratory irritation.

Precautionary statements

Prevention: Keep away from heat. Keep /store away from clothing /combustible materials. Take any precaution to avoid mixing with combustibles. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection.

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

IF INHALED: Remove a person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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.

Fire: In case of fire, use dry chemical, or alcohol-resistant foam to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Hydrogen Peroxide	dihydrogen dioxide; hydrogen dioxide	7722-84-1	12%

Water	Aqua; H2O	7732-18-5	88%
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SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	If unconscious, place in recovery position and seek medical advice.
In case of skin contact	Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
In case of eye contact	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital.
If swallowed	Clean mouth with water and drink afterwards plenty of water. Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Note to physician: treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Alcohol-resistant foam, Carbon dioxide, dry chemical.
Unsuitable extinguishing media	High-volume water jet.

5.2 Specific hazards arising from the substance or mixture

Do not allow run-off from fire fighting to enter drains or water courses.
 Hazardous Combustion Products: Acetic acid.

5.3 Special protective equipment and precautions for firefighters

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons, in case of fire, cans should be stored separately in closed containments.

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	0	1	OX

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2 Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains, inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Neutralize with chalk, alkali solution or ammonia. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/ national regulations.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure. Obtain special instructions before use. Avoid contact with skin and eyes. For personal protection, see Section 8. Smoking, eating, and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations/ working materials must comply with the technological safety standards.

Incompatibilities

Reducing agents, bases, alcohols, flammable materials, organic solvent, metals.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value	
Hydrogen Peroxide	TWA	1 ppm	1.4 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Hydrogen Peroxide	TWA	1 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value	
Hydrogen Peroxide	TWA	1 ppm	1.4 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

No information available.

Personal protective equipment

Eye/face protection

Eye wash bottle with pure water. Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.

Skin protection

Impervious clothing.

Body Protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection

No information available.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Odorless
Odor Threshold	No information available
pH	2 - 4 @ 20 °C (68 °F)
Melting Point/Range	-27 °C (-17 °F)
Boiling Point/Range	106 °C (223 °F)
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	17.4 - 25 mmHg
Vapor Density	No information available
Density	1.12 @ 20 - 25 °C (68 - 77 °F)
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	1.25 mPa.s
Molecular Formula	H ₂ O ₂
Molecular Weight	34.01 g/mol
VOC Content(%)	No information available
Oxidizing properties	Oxidizer

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Product will not undergo hazardous polymerization. Stable under recommended storage conditions.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Reducing agents, bases, alcohols, flammable materials, organic solvent, metals.

10.6 Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrogen Peroxide	1193 mg/kg	-	-

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/eye irritation

Risk of serious damage to eyes.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Hydrogen Peroxide	7722-84-1	Not	Not listed	A3	Not listed	A3

Specific target organ toxicity - single exposure

Respiratory system.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

No information available.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results
Hydrogen Peroxide	LC50	Water Flea (<i>D. pulex</i>)	2.4 mg/L, 48h
	EC50	Microtox (<i>S. costatum</i>)	1.38 mg/L, 72h

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-no	UN2984
Proper Shipping Name	Hydrogen peroxide, aqueous solutions
Hazard Class	5.1
Packing Group	III

IMDG

UN-no	UN2984
Proper Shipping Name	Hydrogen peroxide, aqueous solutions
Hazard Class	5.1
Packing Group	III

IATA

UN-no	UN2984
Proper Shipping Name	Hydrogen peroxide, aqueous solutions
Hazard Class	5.1
Packing Group	III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed, Hydrogen Peroxide (CAS #7722-84-1), RQ: 1000 lb.

SARA 304 Emergency release notification

Listed, Hydrogen Peroxide (CAS #7722-84-1), RQ: 1000 lb.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations**US. Massachusetts RTK - Substance List**

Listed, Hydrogen Peroxide (CAS #7722-84-1).

US. New Jersey Worker and Community Right-to-Know Act

Listed, Hydrogen Peroxide (CAS #7722-84-1).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Hydrogen Peroxide (CAS #7722-84-1).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 11/27/2023

Revision 1: 08/05/2024

Revision 2: 02/21/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.