SAFETY DATA SHEET

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

1.1 Product identifiers

Product name:	Hydrogen Peroxide 30%
CAS number:	7722-84-1
Synonyms:	Hydrogen Peroxide (H2O2)

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

Identified Uses: Laboratory Chemicals.

1.3 Details of the supplier of the safety data sheet

Company	: Lab Alley, LLC 22111 Highway 71 West, Suite 601 Spicewood, Texas 78669 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 2)
Acute toxicity, oral (Category 4)
Serious eye damage/eye irritation (Category 1)

2.2 GHS Label elements, including precautionary statements

Pictogram:

Signal Word: **Danger**

Hazard statement(s): May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye damage.

Precautionary statement(s): **Prevention** - Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep/Store away from clothing/flammable materials/combustibles. Take any precaution to avoid mixing with combustibles/flammables. **Response** - 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 or doctor. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur. IF ON SKIN OR CLOTHING: Wash with plenty of water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Hazards not otherwise classified

No hazards not otherwise classified were identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	CAS-No	Weight %
Hydrogen peroxide	7722-84-1	30
Water	7732-18-5	70

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice: If symptoms persist, call a physician.

If inhaled: Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

In case of skin contact: Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

In case of ingestion: Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable (and unsuitable) extinguishing media Use water spray or fog; do not use straight streams.

5.2 Specific hazards arising from the substance or mixture

Corrosive Material. Containers may explode when heated. Oxidizer: Contact with combustible/organic material may cause fire. In the event of fire and/or explosion do not breathe fumes. Thermal decomposition can lead to release of irritating gases and vapors. May ignite combustibles (wood paper, oil, clothing, etc.).

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Do not use steel or aluminum tools or equipment

6.2 Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Sweep up and shovel into suitable containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. Keep away from clothing and other combustible materials.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. To maintain product quality. Keep refrigerated. Keep away from direct sunlight. Do not store in metal containers. Containers should be vented periodically in order to overcome pressure buildup. Do not store near combustible materials.

SECTION 8. Exposure controls/personal protection

8.1 Occupational exposure limits

Control parameters

Exposure Guidelines Ingredients with workplace control parameters.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m³	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m³	Mexico: TWA 1 ppm Mexico: TWA 1.5 mg/m³ Mexico: STEL 2 ppm Mexico: STEL 3 mg/m³
Chemical name	**British Columbia**	**Quebec**	**Ontario TWAEV**	**Alberta**
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m³	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m³

8.2 Exposure controls

Appropriate engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation especially in confined areas.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Long sleeved clothing.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation especially in confined areas.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid.
Appearance	Clear.
Odor	Pungent.
Odor Thresh	No information available.
pH	3.3
Melting Point/Range	-33 °C / -27.4 °F
Boiling Point/Range	108 °C / 226.4 °F @ 760 mmHg
Flash Point	Not applicable.
Evaporation Rate	> 1.0 (Butyl acetate = 1.0)
Flammability (solid, gas)	Not applicable.
Flammability or explosive limit	
Upper	: No data available.
Lower	: No data available.

Vapor Pressure	23 mm Hg @ 30 °C
Vapor Density	1.10
Density	1.11
Solubility	Miscible with water.

Partition coefficient; n-octanol/water	No data available.
Autoignition Temp	No information available.
Decomposition Temp	No information available.
Viscosity	No information available.
Molecular Formula	H202
Molecular Weight	34.01
VOC Content(%)	No data available.
Oxidizing properties	No data available.

9.2 Other safety information

None.

SECTION 10: Stability and reactivity

10.1 Reactivity

Yes

10.2 Chemical stability

Oxidizer. Contact with combustible/organic material may cause fire. Light sensitive.

10.3 Possibility of hazardous reactions

None under normal processing. Hazardous polymerization does not occur.

10.4 Conditions to avoid

Incompatible products. Excess heat. Exposure to light. Combustible material.

10.5 Incompatible materials

Strong oxidizing agents, Metals, Reducing agents, Alcohols, Ammonia, copper, Copper alloys, lead oxides, Cyanides, Sulfides, lead, Acetone, Aluminium, , Strong reducing agents, Combustible material

10.6 Hazardous decomposition products

Hydrogen, Oxygen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute Toxicity

Product Information	
Oral LD50	Category 4. ATE = 300 - 2000 mg/kg.
Dermal LD50	Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Vapor LC50	Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.
Component Information	

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	Not listed	Not listed
Hydrogen peroxide	376 mg/kg (Rat) (90%) 910 mg/kg (Rat) (20-60%) 1518 mg/kg (Rat) (8-20% sol)	>2000 mg/kg (Rabbit)	LC50 = 2000 mg/m³ (Rat) 4 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

May cause irritation.

Serious eye damage/eye irritation

Causes severe eye burns. May cause irritation.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

This product is not recognized as mutagenic by Research Agencies. In vivo tests did not show mutagenic effects.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Hydrogen peroxide	7722-84-1	Not listed	Not listed	A3	Not listed	A3

IARC: (International Agency for Research on Cancer)

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

IARC: (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans

ACGIH: (American Conference of Governmental Industrial Hygienists)
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens
A1 - Confirmed Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen
A4 - Not Classifiable as a Human Carcinogen
A5 - Not Suspected as a Human Carcinogen

Reproductive toxicity

No information available.

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Aspiration hazard

No information available.

Chronic effects

No information available.

11.2 Additional information

None.

SECTION 12. Ecological information

12.1 Toxicity

Ecotoxicity

Contains a substance which is: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Hydrogen peroxide	EC50 2.5 mg/L/72h	LC50: 16.4 mg/L/96h (P.promelas)	Not listed	EC50 7.7 mg/L/24h

12.2 Persistence and degradability

Persistence is unlikely Decomposes Soluble in water based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Hydrogen peroxide	-1.1

12.5 Results of PBT and vBvB assessment

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

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

The toxicological properties have not been fully investigated.

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

UN-No	UN2014
Proper Shipping Name	Hydrogen peroxide, aqueous solutions
Hazard Class	5.1
Packing Group	II

TDG

UN-No	UN2014
Proper Shipping Name	Hydrogen peroxide, aqueous solutions
Hazard Class	5.1
Packing Group	II

IMDG/IMO

UN-No	UN2014
Proper Shipping Name	Hydrogen peroxide, aqueous solutions
Hazard Class	5.1
Packing Group	II

ICAO/IATA

UN-No	UN2014
Proper Shipping Name	Hydrogen peroxide, aqueous solutions
Hazard Class Packing Group	5.1 II

SECTION 15: Regulatory information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Water	7732-18-5	X	ACTIVE	-
Hydrogen peroxide	7722-84-1	X	ACTIVE	-

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Water	7732-18-5	X	-	231-791-2	X	-	X	X	KE-35400
Hydrogen peroxide	7722-84-1	X	-	231-765-0	X	X	X	X	KE-20204

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Hydrogen peroxide	-	TQ: 7500 lb

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Hydrogen peroxide	-	1000 lb

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Hydrogen peroxide	X	X	X	-	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product contains the following DHS chemicals:
Legend - STQs = Screening Threshold Quantities, APA = A placarded amount

Component	DHS Chemical Facility Anti-Terrorism Standard
Hydrogen peroxide	Theft STQs - 400lb (concentration >=35%)

Other International Regulations

Mexico - Grade No information available

SECTION 16: Other information

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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.