

Safety Data Sheet

Hydrogen Peroxide, 30%

Section 1 - Chemical Product and Company Identification

SDS Name: Hydrogen Peroxide, 30%

Catalog Numbers: SO-863, C-212-2

Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923

For information, call: 978-739-4883

Emergency Number: 800-424-9300

For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H272-Oxidizing liquids: 2

H302-Acute toxicity, oral: 4

H314-Skin corrosion/irritation: 1A

H318-Serious eye damage/eye irritation: 1

Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Danger

Hazard Statements:

H272-May intensify fire; oxidizer

H302-Harmful if swallowed

H314-Causes severe skin burns and eye damage

H318-Causes serious eye damage

Precautionary Statements:

P210-Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

P220-Keep away from clothing and other combustible materials.

P260-Do not breathe dusts or mists.

P264-Wash thoroughly after handling.

P270-Do not eat, drink, or smoke when using this product.

P280-Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312-If swallowed: Call a Poison Center/doctor if you feel unwell.

P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353-If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310-Immediately call a Poison Center/doctor.

P330-Rinse mouth.

P363-Wash contaminated clothing before reuse.

P370+P378-In case of fire: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam to extinguish.

P405-Store locked up.

P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7722-84-1	Hydrogen Peroxide	28-32 w/v
7732-18-5	Water	Balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek immediate medical attention.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Wash with soap and water. Remove contaminated clothing and shoes. Seek immediate medical advice.

Oral Exposure: If swallowed, get immediate medical attention. Rinse mouth with water. Do NOT induce vomiting.

Inhalation Exposure: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Seek immediate medical attention.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion. Contact with combustibles may cause extremely violent combustion.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Hydrogen, oxygen, potentially hazardous vapors.

Flash Point: Not available

Autoignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability: 2 OXIDIZING LIQUID

Note: Can react with metals to release flammable hydrogen gas. May react explosively with combustible organics or readily oxidizable materials such as alcohols, turpentine, charcoal, organic refuse, metal powders, hydrogen sulfite, etc.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Do NOT use combustible materials such as saw dust. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Use with adequate ventilation. Do not ingest or inhale. Do not get in eyes. Do not get on skin or clothing. Keep in a non-metal container with a vented cap. **Hydrogen peroxide must be stored in containers with vented closures. Store in the refrigerator (4°).** Light sensitive. Avoid contact with combustibles, organics, or any other oxidizable materials. Do not use metal tools or containers. Keep away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: 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: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Hydrogen Peroxide CAS#7722-84-1	1 ppm TWA	1 ppm TWA 1.4 mg/m ³ TWA 75 ppm IDLH	1 ppm TWA 1.4 mg/m ³ TWA

OSHA Vacated PELs: Hydrogen Peroxide: 1 ppm TWA; 1.4 mg/m³ TWA

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear, colorless

Odor: Pungent

Vapor Pressure: 3.1

Odor Threshold: Not available

Vapor Density: 1.10

pH: Approx. 3.3 (30%)

Relative Density: 1.1

Melting point/freezing point: -33°C (-27.4°F)

Solubility: Completely miscible with water

Boiling Point: 108°C (226.4°F) at 760 mmHg

Flash Point: Not applicable

Evaporation Rate: >1.0 (Butyl Acetate = 1.0)

Flammability (solid, gas): Not applicable

Partition coefficient: n-octanol/water: Not available

Autoignition Temperature: Not available

Decomposition Temperature: ≥60°C (140°F)

Viscosity: Not available

Specific Gravity/Density: 1.11

Section 10 - Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions. **Keep refrigerated with vented caps.** Oxidizer. Contact with combustibles/organic material may cause fire. Light sensitive.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, combustible materials, and confined spaces. Avoid exposure to light. Must have vented closure.

Incompatibilities with Other Materials: Oxidizing agents, reducing agents, copper/copper alloys, alkalis, organic materials, combustible materials, acids, powdered metals, bases, zinc, iron, nickel, brass, iron salts, and heavy metals.

Hazardous Decomposition Products: Hydrogen, oxygen, and potentially hazardous vapors.

Section 11 - Toxicological Information

CAS#7722-84-1 Hydrogen Peroxide:

LD50 Oral: 693.7 mg/kg (rat)

LD50 Dermal: >2000 mg/kg (rabbit)

LC50 Inhalation: 11.1 mg/L 4h vapor (expert judgement)

Carcinogenicity: Hydrogen Peroxide CAS#7722-84-1 is not listed by IARC, NTP, OSHA, or California Prop 65. Hydrogen Peroxide is listed by ACGIH (A3, Animal Carcinogen).

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available.

Teratogenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects: Not available.

Neurotoxicity: Not available.

Mutagenicity: Not available.

Specific Target Organ Toxicity, Single Exposure: Not available.

Specific Target Organ Toxicity, Repeated Exposure: Not available.

Symptoms associated with exposure: Ingestion causes severe swelling, damage to the tissue/digestive tract, and danger of perforation. Causes severe skin burns and eye damage. Inhalation may cause respiratory irritation.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains. Harmful to aquatic life. May cause long-term adverse effects in the aquatic environment.

CAS#7722-84-1 Hydrogen Peroxide:

LC50, freshwater fish: 16.4 mg/L 96h semi-static (pimephales promelas)(fathead minnow)

LC50, water flea: 2.4 mg/L 48h semi-static (daphnia pulex)

ErC50, algae: 1.38 mg/L 72h static (skeletonema costatum)(marine diatom)

EC50, bacteria: 466 mg/L 30min static (activated sludge)

Persistence and degradability: Not available.

Bio-accumulative potential: Not available.

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

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 - Transport Information

DOT

Proper shipping name: Hydrogen Peroxide, Aqueous solutions

UN2014

PG II

Hazard class 5.1

Subsidiary hazard class 8

Note: Hydrogen peroxide must be stored in containers with vented caps.

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 5-11-22

Revision #1: 6-5-24

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