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 H332-Acute toxicity, inhalation: 4

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 H332-Harmful if inhaled

Precautionary Statements:

P210-Keep away from heat.

P220-Keep/Store away from clothing/combustible materials.

P221-Take any precaution to avoid mixing with combustibles.

P260-Do not breathe dust/fume/gas/mist/vapours/spray.

P261-Avoid breathing dust/fume/gas/mist/vapours/spray.

P264-Wash 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.

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

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.

P304+P340-If inhaled: Remove victim to fresh air and keep at rest in a position 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 or doctor/physician.

P312-Call a Poison Center or doctor/physician if you feel unwell.

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 for extinction.

P405-Store locked up.

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

Section 3 - Composition	, Information on Ingredients
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CAS#	Chemical Name	Percent
7722-84-1	Hydrogen Peroxide	29-32 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. Corrosive to naked eye. May cause blindness.

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. Corrosive to exposed skin.

Oral Exposure: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal burns and perforation of the digestive tract. Rinse mouth with water, and after rinsing, drink water. Do NOT induce vomiting. Get immediate medical attention.

Inhalation Exposure: If inhaled, remove to fresh air. If not breathing give artificial respiration. Seek immediate medical attention. Effects may be delayed. May cause chemical burns to the respiratory tract.

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. 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.

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

Hazardous Combustion Products: Hydrogen, oxygen.

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

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 container closed tightly – **use vented cap**. Store in the **REFRIGERATOR**. Avoid contact with combustibles, organics, or any other oxidizable materials. Do not use with metal tools or containers. **LIGHT SENSITIVE**. Must be stored with vented closures. 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	NIOSH	OSHA - Final PELs
Hydrogen Peroxide CAS#7722-84-1	1 ppm TWA	1 ppm TWA 1.4 mg/m3 TWA 75 ppm IDLH	1 ppm TWA 1.4 mg/m3 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
Odor: Pungent
Vapor Pressure: 23 mmHg at 30°C

Odor threshold: Not available Vapor Density: 1.10 pH: approx. 3.3 (30%) Relative density: Not available Melting point/freezing point: -33°C Solubility: Completely miscible in water Boiling Point: 108°C 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 Auto-ignition temperature: Not available Decomposition temperature: Not available Viscosity: Not available Specific Gravity/Density: 1.11

Section 10 - Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions (store in refrigerator with vented cap). Oxidizer. Contact with combustibles/organic material may cause fire. Light sensitive.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, combustible material, confined spaces, and exposure to light.

Incompatibilities with Other Materials: Strong oxidizing agents, copper, finely powdered metals, strong reducing agents, strong bases, combustible materials, zinc, iron, nickel, brass, iron salts, organics, heavy metals and ions such as copper, chromium, iron, iron salts, and silver. Dust, rust, nitric acid, water-reactive materials, graphite gaskets, packaging, and lubricants. Alkalis containing heavy metals.

Hazardous Decomposition Products: Hydrogen, oxygen.

Section 11 - Toxicological Information

CAS#7722-84-1 Hydrogen Peroxide:

LD50 Oral: 910 mg/kg (20-60%) (rat) LD50 Dermal: >2000 mg/kg (rat) LC50 Inhalation: 2000 mg/m3 4h (rat)

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).

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

Note: Corrosive material. Ingestion may cause severe and permanent damage to the digestive tract (gastrointestinal burns and perforation). May cause blindness. Corrosive to exposed skin. May cause chemical burns to the respiratory tract.

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 organisms. May cause long-term adverse effects in the aquatic environment.

CAS#7722-84-1 Hydrogen Peroxide:

LC50, freshwater fish: 16.4 mg/L 96h (pimephales promelas) EC50, freshwater algae: 2.5 mg/L 72h EC50, water flea: 7.7 mg/L 24h

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 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

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Rowley Biochemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rowley Biochemical, Inc. has been advised of the possibility of such damages.