



Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Hydrogen Peroxide, 50% (v/v)

Approximately 15% (w/w)

Product Number R3821610

Other Identifying Product Numbers R3821610-1BV, R3821610-20E1V, R3821610-4BV

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company Ricca Chemical Company

Address 412 West Fork Drive

Arlington, TX 76012 USA

Telephone 888-467-4222

1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887



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SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

Hazard Class	Category	Hazard Statements	Precautionary Statements
Skin Corrosion / Irritation	Category 1	H314	P260,P264,P280,P301+P330+P331, P303+P361+P353,P363,P304+P340, P310,P321,P305+P351+P338,P405, P501
Serious Eye Damage / Eye Irritation	Category 1	H318	P280,P305+P351+P338,P310
Oxidizing Liquids	Category 3	H272	P210,P220,P280,P370+P378,P501

2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

Hazard Number	Hazard Statement
H272	May intensify fire; oxidizer
H314	Causes severe skin burns and eye damage

Precautionary Statements:

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Prevention

Precautionary Number	Precautionary Statement
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 fumes or mist.
P264	Wash hands, arms, and face thoroughly after handling.
P280	Wear protective gloves and eye protection.

Response

Precautionary Number	Precautionary Statement
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 or 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 or doctor.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish.

Storage

Precautionary Number	Precautionary Statement
P405	Store locked up.

Disposal

Precautionary Number	Precautionary Statement
P501	Dispose of contents/container to suitable waste stream in accordance with local, state, federal, and international regulations.

2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

This product does not contain any ingredients of unknown acute toxicity.

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
water	Water	7732-18-5	84.26
hydrogen peroxide	Hydrogen Peroxide; Dihydrogen dioxide	7722-84-1	15.74

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, tearing and burns. Symptoms may include corneal ulceration and possible damage to vision.

Ingestion: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Dilute with large amounts of water. Do not induce vomiting. Vomiting may cause further damage due to the corrosive nature of this product. Call a physician.

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. May cause irritation, redness and pain. Corrosive destruction is possible. Exposure may bleach skin white.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Causes severe skin burns and eye damage CAUTION! Oxidizer. Reacts with a broad range of materials. Corrosive. Respiratory irritant. Causes burns to eyes and skin. Wash areas of contact with plenty of water. For eyes, get medical attention. If ingested, give large quantity of water. Call a physician. EYE CONTACT: May cause irritation, redness, pain, tearing and burns. Symptoms may include corneal ulceration and possible damage to vision. SKIN CONTACT: May cause irritation, redness and pain. Corrosive destruction is possible. Exposure may bleach skin white.

4.3. Immediate Medical Attention or Special Treatment Needed

Immediately call a poison center or doctor. Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Observe 48 hours for lung effects. Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Dilute with large amounts of water. Do not induce vomiting. Vomiting may cause further damage due to the corrosive nature of this product. Call a physician.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish. Chemical extinguishing agents may accelerate decomposition. Use LARGE quantities of water as fog to fight FIRES in which this material is involved.

5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

May intensify fire; oxidizer Vapors can flow along surfaces to distant ignition source and flashback. Use water spray to blanket fire, cool fire exposed containers, and to flush non-ignited spills or vapors away from fire. Explosion hazard when exposed to heat, flame or oxidizers.

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5.3. Special Protective Equipment and Precautions for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Stop or control the leak, if this can be done without undue risk. Use water spray to cool and disperse vapors and protect personnel.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Keep away from combustibles, ignition sources, organic materials, or other oxidizable substances. Refrigeration will slow down decomposition. Containers should be vented. Periodically check for bulging containers, which can burst from increased pressure. Do not return any unused material to the original container. Utensils used must be of compatible materials like glass, stainless steel, aluminum or plastic.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits



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U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

Chemical Name	CAS Number	Exposure Limit
Hydrogen Peroxide	7722-84-1	1 ppm TWA; 1.4 mg/m3 TWA

U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

U.S. OSHA - Specifically Regulated Chemicals

No limits found.

ACGIH - Threshold Limit Values - Ceilings (TLV-C)

No limits found.

ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

No limits found.

ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

Chemical Name	CAS Number	Exposure Limit
Hydrogen Peroxide	7722-84-1	1 ppm TWA

8.2. Engineering Controls

No specific controls are needed. Normal room ventilation is adequate.

8.3. Individual Protective Measures and Personal Protective Equipment

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves, Butyl, Viton or Natural Rubber (latex).

Eye Protection: Safety glasses or goggles.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	Liquid
Color:	Colorless
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	Approximately 0°C
Boiling Point/Range:	Approximately 100°C
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Flash Point:	Not flammable
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	Data not available.
Kinematic Viscosity:	Data not available.
Solubility:	Miscible
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	1.06
Relative Vapor Density:	Data not available.
Particle Characteristics:	Data not available.
Partition Coefficient n-octanol/water, log	Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage. This solution gradually decomposes at room temperature, and more rapidly as the temperature increases, losing available oxygen.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Combustible materials, alkalis, alcohols, iodides, lime water, sulfites, permanganates, organic compounds (such as wood, oil), acids, metals. Ammonia and their Carbonates, Albumin, Phenol, Charcoal, Chlorides, Alkali Citrates, Ferrous, Mercurous or Gold salts, Hypophosphites, Limewater, Tinctures and organic matter in general.

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10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Hydrogen Peroxide	7722-84-1	Oral LD50 Rat 1518 mg/kg (Source: NLM_CIP)

Acute Toxicity - Dermal Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Hydrogen Peroxide	7722-84-1	Dermal LD50 Rabbit 9200 mg/kg (test substance administered as a 70% solution, Source: EU_RAR)

Acute Toxicity - Inhalation Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Hydrogen Peroxide	7722-84-1	Inhalation LC50 Acute Toxicity Estimate 11 mg/L 4 h (Source: ECHA)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
Hydrogen Peroxide	7722-84-1	Group 3 (Not Classified) - Monograph 71 [1999]; Supplement 7 [1987]; Monograph 36 [1985]

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
No data found.		

U.S. OSHA specifically regulated carcinogens

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Chemical Name	CAS Number	Classification
No data found.		

11.3 Additional Toxicology Information:

Causes severe skin burns and eye damage.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Hydrogen Peroxide	7722-84-1	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 16.4 mg/L (IUCLID); LC50 96 h Lepomis macrochirus 18 - 56 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 10.0 - 32.0 mg/L [static] (EPA)
Hydrogen Peroxide	7722-84-1	Water Flea	Acute	EC50 48 h Daphnia magna 18 - 32 mg/L [Static] (EPA)

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

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SECTION 14: Transportation Information

14.1 Transportation by Land - Department of Transportation (DOT, United States of America)

Sizes: 1 L, 4 L, 20 L

UN Number: UN2984

Proper Shipping Name: Hydrogen Peroxide, Aqueous Solutions

Hazard Class: 5.1

Packing Group: III

Hazard Label(s):



14.2 Transportation by Air - International Air Transport Association (IATA)

Sizes: 1 L, 4 L, 20 L

UN Number: UN2984

Proper Shipping Name: Hydrogen Peroxide, Aqueous Solution

Hazard Class: 5.1

Packing Group: III

Hazard Label(s):



14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 1 L, 4 L, 20 L

UN Number: UN2984

Proper Shipping Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS

Hazard Class: 5.1

Packing Group: III

Hazard Label(s):



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SECTION 15: Regulatory Information

15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
No data found.		

15.02. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Chemical Name	CAS Number	RQ	TPQ
Hydrogen Peroxide	7722-84-1	1000 lb TPQ (concentration >52%)	1000 lb EPCRA RQ (concentration >52%)

15.03. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Chemical Name	CAS Number	Regulatory Information
No data found.		

15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

Chemical Name	CAS Number	List
No data found.		

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Hydrogen Peroxide	7722-84-1	Extraordinarily hazardous

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Hydrogen Peroxide	7722-84-1	Environmental hazard (concentration >52%); Present

15.07. New Jersey Worker and Community Right-to-Know Components

Chemical Name	CAS Number	Regulatory Information
Hydrogen Peroxide	7722-84-1	sn 1015

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15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
No data found.		

15.09. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Chemical Name	CAS Number	List	Status
Hydrogen Peroxide	7722-84-1	DSL	Present
Water	7732-18-5	DSL	Present

15.10. United States of America Toxic Substances Control Act (TSCA) List

Chemical Name	CAS Number	Status
Hydrogen Peroxide	7722-84-1	Present (ACTIVE)
Water	7732-18-5	Present [XU] (ACTIVE)

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Chemical Name	CAS Number	List	Number
Hydrogen Peroxide	7722-84-1	EINECS	231-765-0
Water	7732-18-5	EINECS	231-791-2

15.12. China - Inventory of Existing chemical Substances (IECSC)

Chemical Name	CAS Number	Status
Hydrogen Peroxide	7722-84-1	Present [14139]
Water	7732-18-5	Present [32224]

15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

Chemical Name	CAS Number	List	Status
Hydrogen Peroxide	7722-84-1	Annex 1	Present [KE-20204]
Water	7732-18-5	Annex 1	Present [KE-35400]

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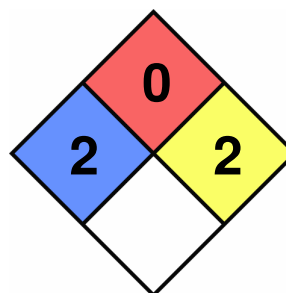
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Hydrogen Peroxide	7722-84-1	(1)-419
Water	7732-18-5	- (listed on Japanese Pharmacopoeia 8th Edition)

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

Health: 2
Flammability: 0
Reactivity: 2
Special Hazard:



16.2 Document Revision

Last Revision Date:
 2026-05-22

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.