

Material Safety Data Sheet

Hydrogen Peroxide 3%

ACC# 40069

Section 1 - Chemical Product and Company Identification

MSDS Name: Hydrogen Peroxide 3%

Catalog Numbers: S748821, S748822, H312-4, H312-500, H312P-4, H312SAM1, H312SAM2, H312SAM3, H324-500, NC9034022, NC9472802, NC9513651, NC9950148, S93263

Synonyms: None.

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7732-18-5	Water	97	231-791-2
7722-84-1	Hydrogen peroxide	3.0	231-765-0

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: Clear liquid.

Caution! May cause severe eye irritation and possible injury. May cause respiratory and digestive tract irritation. May cause skin irritation.

Target Organs: No data found.

Potential Health Effects

Eye: Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. Vapors may cause eye irritation.

Skin: May cause skin irritation. May cause skin discoloration. May cause reddening of the skin.

Ingestion: May cause irritation of the digestive tract. May lead to distention of the esophagus and stomach.

Inhalation: May cause respiratory tract irritation. Irritation may lead to chemical pneumonitis and pulmonary edema.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician: Treat symptomatically and supportively.

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. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire. Use flooding quantities of water as spray.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 1

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm

sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Water	none listed	none listed	none listed
Hydrogen peroxide	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: Water: No OSHA Vacated PELs are listed for this chemical. Hydrogen peroxide: 1 ppm TWA; 1.4 mg/m³ TWA

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: 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.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear

Odor: slight

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: >1.00

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: > 100 deg C

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Soluble.

Specific Gravity/Density: >1.000

Molecular Formula: Solution

Molecular Weight: Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Decomposes slowly to release oxygen.

Conditions to Avoid: Incompatible materials, light, ignition sources, metals, excess heat, reducing agents, alkaline materials, oxidizers, temperatures above 300°C.

Incompatibilities with Other Materials: Hydrogen peroxide is incompatible with acetal + acetic acid, acetaldehyde + desiccants, acetic acid, acetic acid + N-heterocycles, acetic acid + 3-thioethanol, acetic anhydride, acetone, alcohols, alcohols + sulfuric acid, aluminum isopropoxide + heavy metal salts, 2-amino-4-methyloxazole, aromatic hydrocarbons + trifluoroacetic acid, azalaic acid + sulfuric acid, benzenesulfonic anhydride, tert-butanol + sulfuric acid, carboxylic acids, carbon, coal, diethyl ether, 3,5-dimethyl-3-hexanol + sulfuric acid, dimethylphenylphosphine, diphenyl diselenide, 2-ethoxyethanol + polyacrylamide + toluene, ethyl acetate, formic acid + metaboric acid, gadolinium hydroxide, gallium + hydrochloric acid, hydrogen + palladium catalyst, hydrogen selenide, iron (III) sulfate + 2-methylpyridine + sulfuric acid, iron (II) sulfate + nitric acid + sodium carboxymethylcellulose, ketene, ketones + nitric acid, lead + trioxane, lithium tetrahydroaluminate, mercury (II) oxide + nitric acid, metals, metal oxides or metal salts, methanol + tert-amine + platinum catalyst, methanol + phosphoric acid, 4-methyl-2,4,6-triazatricyclo-undeca-8-ene-3,5dione + potassium hydroxide, nitric acid + soils, nitric acid + thiourea, nitrogenous bases, organic compounds, organic materials + sulfuric acid, oxygenated compounds, 2-phenyl-1,1-dimethylethanol + sulfuric acid, alpha-phenylselenoketones, phosphorus, phosphorus (V) oxide, poly(acetoxyacrylic acid lactone) + poly(2-hydroxyacrylic acid), sulfuric acid, tetrahydrothiophene, tin(II) chloride, unsaturated compounds, and vinyl acetate.

Hazardous Decomposition Products: Nitrogen oxides, hydrogen gas, oxygen, hydrazoic acid.

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:

CAS# 7732-18-5: ZC0110000

CAS# 7722-84-1: MX0887000; MX0888000; MX0890000; MX0899000; MX0899500; MX0900000

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg;

CAS# 7722-84-1:
Draize test, rabbit, eye: 1 mg Severe;
Inhalation, rat: LC50 = 2 gm/m³/4H;
Inhalation, rat: LC50 = 2000 mg/m³;
Oral, mouse: LD50 = 2000 mg/kg;
Oral, rabbit: LD50 = 820 mg/kg;
Oral, rat: LD50 = 1518 mg/kg;
Oral, rat: LD50 = 910 mg/kg;
Oral, rat: LD50 = 376 mg/kg;
Oral, rat: LD50 = 4050 mg/kg;
Skin, rat: LD50 = 3 gm/kg;
Skin, rat: LD50 = 4060 mg/kg;

Carcinogenicity:

CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 7722-84-1:

- **ACGIH:** A3 - Confirmed animal carcinogen with unknown relevance to humans
- **California:** Not listed.
- **NTP:** Not listed.
- **IARC:** Not listed.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: No information found.

Physical: No information found.

Other: No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 7732-18-5 is listed on the TSCA inventory.

CAS# 7722-84-1 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

CAS# 7722-84-1: 1000 lb TPQ (concentration >52%)

SARA Codes

CAS # 7722-84-1: immediate, fire.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

CAS# 7722-84-1 is considered highly hazardous by OSHA.

STATE

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7722-84-1 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 7732-18-5: No information available.

CAS# 7722-84-1: 0

Canada - DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 7722-84-1 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 7722-84-1 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 10/16/1998

Revision #7 Date: 10/03/2005

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 Fisher 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 Fisher has been advised of the possibility of such damages.