

MCCUTCHEON ENTERPRISES, INC.

SAFETY DATA SHEET

Section 1: Identification

Product Name: Hydrogen Peroxide, 7.8%

Chemical Name/Synonyms: H₂O₂

CAS-No: 7722-84-1

Recommended Uses: General Purpose Disinfectant

Manufacturer/Supplier: McCutcheon Enterprises, Inc.
250 Park Road
Apollo, PA 15613
724-568-3623 (24-hour number)

Emergency Telephone Numbers: 911

Section 2: Hazard(s) Identification

Hazard Classification: Serious Eye Damage/Eye Irritation - Category 2A

Signal Word(s): WARNING

Hazard Statements: H319 – Causes Severe Eye Irritation

Pictograms:



Precautionary Statements: P280 - Wear eye or face protection.
P264 - Wash hands thoroughly after handling.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical attention.

Section 3: Composition/ Information on Ingredients

Chemical Name	Synonym	CAS#	Conc.
Water		7732-18-5	92.2%
Hydrogen Peroxide	H ₂ O ₂	7722-84-1	7.8%

Section 4: First-Aid Measures

Skin contact: Flush thoroughly with water. Get medical attention if irritation or symptoms of exposure develop. Remove and launder contaminated clothing before reuse.

Eye contact: Flush eyes with large quantities of water for several minutes, while holding the eyelids apart. Remove contact lenses if easy to do so. Continue rinsing. Get medical attention if irritation persists.

Inhalation: Remove victim to fresh air. If breathing is difficult or irritation persists, get medical attention.

Ingestion: Do not induce vomiting. If conscious, rinse mouth with a small amount of water and give one glass of water to dilute. Never give anything by mouth to an unconscious or drowsy person. If irritation or discomfort occurs, get medical attention.

Most important symptoms: May cause moderate eye irritation. May cause skin irritation with whitening of the skin. Inhalation of mists or vapors may cause mucous membrane and respiratory irritation. If swallowed, may cause intestinal irritation and discomfort.

Indication of immediate medical attention/special treatment: Immediate medical attention should not be required.

Section 5: Fire-Fighting Measures

Suitable extinguishing agents: Use large quantities of water to extinguish fire. DO NOT use any other substance.

Specific Hazards arising from chemical: In closed unventilated containers, risk of rupture due to the increased pressure from decomposition. *This product contains a small amount of hydrogen peroxide which is an oxidizer at high concentrations and may increase flammability of combustible or flammable materials or powdered metals. Hydrogen Peroxide is considered a Class 1 Oxidizer at concentrations above 8%.*

Special protective equipment for firefighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers and structures with water.

Section 6: Accidental Release Measures

Personal precautions: Evacuate spill area and keep unprotected personnel away. Avoid contact with eyes, skin, and clothing. Avoid inhalation of mists and vapors. Wear protective clothing and equipment. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Avoid contact with flammable or combustible materials.

Measures for environmental protection: avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Measures for cleaning/collecting: **SMALL SPILLS:** Stop leak if safe to do so. Move containers from spill area. Dilute with water and mop up possible. Alternatively, absorb with an inert dry material such as diatomaceous earth or vermiculite. Do not use combustible absorbents such as sawdust. Place in appropriate waste disposal container. **LARGE SPILLS:** Stop leak if safe to do so. Move container from spill area. Approach release from upwind. Prevent entry into sewers, waterways, basements, or confined areas by diking and/or diverting. Contain and collect with inert absorbent material (e.g. Diatomaceous earth or vermiculite) and place in container for appropriate waste disposal. Contaminated absorbent material may pose the same hazard as the spilled product.

Section 7: Handling and Storage

Precautions for Safe Handling: Do not ingest. Avoid contact with the eyes, skin, and clothing. Avoid inhalation of mists or vapors. Wear protective clothing and equipment. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep in original container or an approved alternative made from compatible material. Keep in closed containers. Protect product from contamination. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic.

Do not reuse containers. Empty containers may retain product residues which can be hazardous. Empty containers should be triple rinsed with water before discarding. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from heat, direct sunlight, and incompatible materials. Do not store on wooden shelves or floors. Protect from physical damage.

Incompatible Products: Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols and terpenes) may produce self-accelerated thermal decomposition.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

Chemical Name	OSHA PEL	OSHA PEL (ceiling)	ACGIH TLV-TWA	ACGIH STEL
Hydrogen Peroxide	1 ppm 1.4 mg/m ³	-	1 ppm 1.4 mg/m ³	-

Engineering Controls: Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation to maintain worker exposure below OEL's.

General protective and hygienic measures: Protective engineering controls should be implemented and in use before PPE is considered. Avoid inhalation of vapors, mist, or gas. Clean water should be available for washing in case of eye or skin contamination.

Respiratory Protection: If concentrations exceed OEL's, NIOSH approved supplied air respirators must be used. DO NOT use any form of air-purifying respirator or filtering facepiece (e.g. N95), especially those containing oxidizable sorbents such as activated carbon.

Skin and Body Protection: Personal Protective Equipment for the body should be selected based on the task performed and the risks involved. Aprons or coveralls made of polyester acrylic fiber, polyvinyl chloride (PVC), polyethylene, or neoprene*. Chemical resistant boots or boot covers may also be required based on task being performed. DO NOT wear any form of boot or overboot made of nylon or nylon blends. DO NOT USE cotton, wool, or leather as these materials may react with concentrations of hydrogen peroxide. Clothing must be washed thoroughly with water should it come in contact with hydrogen peroxide as this may pose a fire hazard if allowed to dry.

Hand Protection: Chemical resistant, impervious gloves such as natural rubber, PVC, neoprene, or nitrile*.

Eye/Face protection: Chemical resistant goggles and face shield should be worn for tasks with potential risk of exposure to splashes, mists, vapors, or gasses.

**PPE selection should be based on Permeation Guides and chemical resistance data provided by manufacturer. Permeation rates and breakthrough times will vary by manufacturer.*

Section 9: Physical and Chemical Properties

Form: Liquid
Odor: Odorless
Odor threshold: N/A
pH: 5.3 to 5.5
Melting point/melting range: 31.25°F (-0.43°C)
Boiling point/boiling range: 212°F (100°C)
Flash point: N/A
Evaporation rate: N/A
Flammability: N/A
Upper/lower flammability or explosive limits: N/A
Auto ignition temperature: N/A
Danger of explosion: N/A
Vapor pressure: N/A
Vapor density: N/A
Relative density: 1.03 at 68°F (20°C)
Solubility in/Miscibility with water: Completely Soluble

Section 10: Stability and Reactivity

Reactivity: Decomposition of hydrogen peroxide liberates heat and oxygen
Chemical stability: Stable under normal storage and handling conditions. Decomposes on heating.
Conditions to avoid: Excessive heat; Contamination; Exposure to UV-rays; pH variations
Incompatible materials: Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron & Iron Salts. Contact with metals (zinc, nickel, brass) metallic ions, alkalis, reducing agents and organic matter (such as alcohols and terpenes) may produce self-accelerated thermal decomposition
Hazardous decomposition products: Decomposition of hydrogen peroxide liberates heat and oxygen. High temperatures and the presence of contamination increases the rate of decomposition.

Section 11: Toxicological Information

Acute toxicity:

LD50 Oral: 50% solution: LD50 > 225 mg/kg (rat)

35 % solution: LD50 1193 mg/kg (rat)

70 % solution: LD50 1026 mg/kg (rat)

LD50 Dermal: 35% solution: LD50 > 2000 mg/kg (rabbit)

70 % solution: LD50 9200 mg/kg (rabbit)

LC50 Inhalation: 50% solution: LC50 > 170 mg/m³ (rat) (4-hr)

Hydrogen Peroxide vapors: LC0 9400 mg/m³ (mouse) (5 - 15 minutes)

Hydrogen Peroxide vapors: LC50 > 2160 mg/m³ (mouse)

Potential routes of exposure/potential health effects

Skin: Prolonged contact may cause skin irritation with whitening of the skin.

Eye: May cause moderate eye irritation with redness and tears.

Inhalation: Vapors, mists, or gasses may cause irritation of the nose, throat, and upper respiratory tract.

Ingestion: Swallowing large amounts may cause gastrointestinal irritation, stomach distention (due to rapid liberation of oxygen, nausea, vomiting, and diarrhea.

Carcinogenic effects: ACGIH rating A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)

Mutagenic effects: Not known to cause mutagenic effects

Reproductive toxicity: Not known cause reproductive toxicity

Sensitization: Not known to cause sensitization

Target organs: Eyes, Skin, Respiratory system

Section 12: Ecological Information

Ecotoxicity: Hydrogen peroxide is naturally produced by sunlight (between 0.1 and 4 ppb in air and to 0.1 mg/L in water). Not expected to have significant environmental effects.

Active Ingredients	Duration	Species	Value	Units
Hydrogen Peroxide	96 h LC50	Fish Pimephales promelas	16.1	mg/L
Hydrogen Peroxide	72 h LC50	Fish Leuciscus idus	35	mg/L
Hydrogen Peroxide	48 h EC50	Daphnia pulex	2.4	mg/L
Hydrogen Peroxide	24 h EC50	Daphnia magna	7.7	mg/L
Hydrogen Peroxide	72 h EC50	Algae Skeletonema costatum	1.38	mg/L
Hydrogen Peroxide	21 d NOEC	Daphnia magna	0.68	mg/L

Mobility: Will likely be mobile in the environment due to its water solubility; will likely degrade over time.

Biodegradation: Hydrogen peroxide in aquatic environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Hydrogen peroxide half-life in freshwater ranged from 8 hours to 20 days, in air from 10 - 20 hours, and in soils from minutes to hours depending upon microbiological activity and metal contamination.

Bioaccumulation: Material may have some potential to bioaccumulate but will likely degrade in most environments before accumulation can occur.

Section 13: Disposal Considerations (non-mandatory)

Disposal Methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14: Transport Information

As 7.8% Hydrogen Peroxide solution:

DOT regulations: Not Regulated

- **UN Number:** None
- **UN Proper Shipping Name:** None
- **Hazard class:** None
- **Packing Group:** None
- **Land transport ADR/RID (cross-border):** None
- **ADR/RID class:** None
- **Maritime transport IMDG:** None

Air transport ICAO-TI and IATA-DGR: None

- **ICAO/IATA Class:** None

Section 15: Regulatory Information

US Federal Regulations

SARA Section 355 (extremely hazardous substances): None

SARA Section 313 (specific toxic chemical listings): None

CERCLA 103 Reportable Quantity: Not subject to CERCLA reporting requirements.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs): None

TSCA (Toxic Substances Control Act): All components of this product are listed on the TSCA Inventory

Section 16: Other Information

SDS date of preparation/update: 6/11/2020

HMIS Rating: Health = 2 Flammability = 0 Reactivity = 0

NFPA Rating: Health = 2 Flammability = 0 Physical Hazard = 0

NOTICE

The information listed in this Safety Data Sheet is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. McCutcheon Enterprises, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.

<https://www.h2o2.com/technical-library/default.aspx?pid=76&name=Hazard-Classes>