



# SAFETY DATA SHEET

## Section 1: Identification

**Product Name:** Hydrogen Peroxide 34%

**Chemical Name/Synonyms:**

**Company:**

### DISTRIBUTOR INFORMATION:

Remix Chem, LLC  
2202 S Figueroa St. #528  
Los Angeles, CA 90007  
[www.remixchem.com](http://www.remixchem.com)

### CHEMTREC EMERGENCY INFORMATION:

For Hazardous Materials [or Dangerous Goods] Incident

Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC 24 Hours

1-800-262-8200 / +1 703-741-5500

CCN: 1002199

## Section 2: Hazard(s) Identification

### Hazard Classification:

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity, Oral	Category 4
Acute Toxicity, Inhalation	Category 4
Serious Eye Damage/eye irritation	Category 1
Skin Corrosion/Irritation	Category 2B
Specific Target Organ Toxicity (Single Exposure) Respiratory System	Category 3
Oxidizing liquids	Category 2

**Signal Word(s):** Danger

### Pictograms:



**Hazard Statements:**

- H270 May cause or intensify fire; oxidizer  
H302 Harmful if swallowed  
H315 Causes skin irritation  
H318 Causes serious eye damage  
H332 Harmful if inhaled  
H335 May cause respiratory irritation

**Precautionary Statements:**

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P220 Keep/store away from clothing/flammable materials/combustibles  
P221 Take any precaution to avoid mixing with combustibles/flammables  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wash goggles/gloves/other PPE thoroughly after handling  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
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 advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P370+P378 In case of fire: Use water  
P403+P235 Store in a well-ventilated place. Keep cool.  
P401 Store locked up.  
P501 Dispose of contents/container to an approved waste disposal plant.

**Description of other hazards:****Other information:**

Keep container in a cool place out of direct sunlight. Store only in vented containers. Do not store on wooden pallets. Do not return unused material to its original container. Avoid contamination - Contamination could cause decomposition and generation of oxygen which may result in high pressure and possible container rupture. Empty drums should be triple rinsed with water before discarding.

**Section 3: Composition/ Information on Ingredients**

Chemical Name	Synonym	CAS#	Conc.
Hydrogen peroxide		7722-84-1	34%

Water		7732-18-5	66%

#### Section 4: First-Aid Measures

<b>After skin contact:</b>	Wash skin with soap and water. Remove contaminated clothing immediately. Consult a physician if irritation persists.
<b>After eye contact:</b>	Rinse thoroughly with soap and water for 15 minutes. Consult a physician if irritation persists.
<b>After inhalation:</b>	Move to fresh air in case of accidental inhalation of vapors. If breathing is difficult, supply oxygen.
<b>After swallowing:</b>	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without a physician's advice. Consult a physician.
<b>Most important symptoms /effects, acute and delayed:</b>	In case of accidental ingestion, necrosis may result from mucous membrane burns (mouth, esophagus and stomach). Oxygen rapid release may cause stomach swelling and hemorrhaging, which may product major, or even fatal, injury to organs if a large amount has been ingested. In case of skin contact, may cause burns, erythema, blisters or even necrosis. Hydrogen Peroxide irritates respiratory system and, if inhaled, may cause inflammation and pulmonary edema. The effects may not be immediate.
<b>Indication of immediate medical attention and special treatment needed:</b>	Hydrogen peroxide at these concentrations is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of corrosive effects on the gastrointestinal tract after ingestion, and the unlikelihood of systemic effects, attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is a remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

#### Section 5: Fire-Fighting Measures

<b>Suitable extinguishing agents:</b>	Water. Do not use any other substance.
<b>Specific hazards arising from the chemical:</b>	In closed unventilated containers, risk of rupture due to the increased pressure from decomposition. Contact with combustible material may cause fire.
<b>Hazardous Combustion Products:</b>	On decomposition, releases oxygen which may intensify fire
<b>Special protective equipment for firefighters:</b>	Use water spray to cool fire exposed surfaces and protect personnel. Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance
<b>Sensitivity to mechanical impact:</b>	Not sensitive
<b>Sensitivity to static discharge:</b>	Not sensitive
<b>Section 6: Accidental Release Measures</b>	
<b>Personal precautions:</b>	Ensure adequate ventilation. Especially in confined areas. Do not breathe vapors, aerosols. Avoid substance contact. Keep away from heat and ignition sources. Eliminate all sources of ignition and remove combustible materials Wear protective gloves/protective clothing and eye/face protective gear when handling.
<b>Other:</b>	Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.
<b>Measures for environmental protection:</b>	Prevent product from entering drains. Do not flush into surface water/sanitary sewer system. If discharged into sewers, dilute with plenty of water
<b>Measures for cleaning/collecting:</b>	Collect, bind and pump off spills. Observe possible material restrictions see (Section 7 and 10). Stop leak and contain spill if this can be done safely. Small Spillage: dilute with large quantities of water

**Methods for cleaning up:**

Flush area with flooding quantities of water. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%.

**Section 7: Handling and Storage**

**Handling:**

Keep/Store away from clothing/ combustible materials. Wear personal protective equipment. Reference to other sections. Never return unused hydrogen peroxide to original container. Contamination may cause decomposition and generation of oxygen gas which could result in high pressures and possible container rupture. Empty drums should be triple rinsed with water before discarding. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic. Pipes and equipment should be passivated before first use. Use only in well-ventilated areas. Hydrogen peroxide should be stored only in vented containers and transferred only in a prescribed manner.

**Storage:**

Keep containers in cool areas out of direct sunlight and away from combustibles. Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into work environment. Containers must be vented. Keep/store only in original container. Store rooms or warehouses should be made of non-combustible materials with impermeable floors. In case of release, spillage should flow to safe area. Containers should be visually inspected on a regular basis to detect any abnormalities (swollen drums, increases in temperature, etc.).

**Incompatible Materials:**

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

**Section 8: Exposure Controls/Personal Protection**

Chemical Name	OSHA PEL	NIOSH	ACGIH TLV	Mexico OEL (TWA)
Hydrogen Peroxide	TWA: 1 ppm TWA: 1.4 mg/m <sub>3</sub>	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m <sub>3</sub>	TWA: 1ppm	TWA: 1 ppm TWA: 1.5 mg/m <sub>3</sub> STEL: 2 ppm STEL: 3 mg/m <sub>3</sub>
Chemical Name	British Columbia	Quebec	Ontario TWA EV	Alberta
Hydrogen Peroxide	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m <sub>3</sub>	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m <sub>3</sub>

ACGIH - American Conference of Governmental Industrial Hygienists  
 OSHA - Occupational Safety and Health Administration  
 NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**General protective and hygienic measures:**

Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

**Breathing equipment:**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Ensure adequate ventilation, especially in confined areas.

**Breathing equipment:**

For body protection wear impervious clothing such as an approved splash protective suit made of SBR rubber, PVC (PVC Outershell w/Polyester Substrate), Gore-Tex (Polyester trilaminate w/Gore-Tex), or a specialized HAZMAT Splash or Protective Suite (Level A, B, or C). For foot protection, wear approved boots made of NBR, PVC, Polyurethane, or neoprene. Overboots made of Latex or PVC, as well as firefighter boots or specialized HAZMAT boots are also permitted. 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 react rapidly with higher concentrations of hydrogen peroxide. Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles, can cause the material to ignite and result in a fire.

**Hand Protection:**

Avoid contact with skin. For hand protection, wear approved gloves made of nitrile, PVC, or neoprene. DO NOT use cotton, wool or leather for these materials react RAPIDLY with higher concentrations of hydrogen peroxide. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.

**Eye protection:**

Use chemical splash-type monogoggles and a full-face shield made of polycarbonate, acetate, polycarbonate/acetate, PETG or thermoplastic.

**Respiratory Protection:** If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA) or other approved air-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)). DO NOT use any form of air-purifying respirator (APR) or filtering facepiece (dust mask), especially those containing oxidizable sorbants such as activated carbon.

**Control of environmental exposure:** Prevent product from entering drains. Do not flush into surface water/sanitary sewer system. If discharged into sewers, dilute with plenty of water

### Section 9: Physical and Chemical Properties

**Form:** Colorless liquid  
**Color:** Clear  
**Odor:** Odorless  
**Odor threshold:** No data available  
**pH:** <= 3.7  
**Melting point/melting range:** -33 °C / -27.4 °F  
**Boiling point/boiling range:** 108°C / 226.4 °  
**Flash point:** Not flammable  
**Evaporation rate:** >1 (butyl acetate=1)  
**Flammability (solid,gas):** N/A  
**Upper/lower flammability or explosive limits:** N/A  
**Auto ignition temperature:** N/A  
**Vapor pressure:** 23 mmHg at 30 °C  
**Vapor density:** No data available  
**Relative density:** 1.13 g/mL at 20 °C  
**Solubility in/Miscibility with water:** Miscible  
**Partition Coefficient n/octanol-water** log Pow : -1.5 at 20 °C  
**Decomposition Temperature:** 100 °C  
**Viscosity, kinematic:** 1.10 cP at 20 °C  
**Oxidizing properties:** Strong oxidizer

### Section 10: Stability and Reactivity

**Reactivity:** Reactive and oxidizing agent.

**Chemical stability:** Stable under normal conditions. Decomposes on heating.

**Possibility of hazardous reactions:** Contact with organic substances may cause fire or explosion. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

**Conditions to avoid:** Excessive heat; Contamination; Exposure to UV-rays; pH variations.

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

**Hazardous decomposition products:** Oxygen which supports combustion. Liable to produce overpressure in container.

**Section 11: Toxicological Information**

**Potential routes of exposure/potential health effects**

Component	LD50 (Oral)	LD50 (Dermal)	LD50 (Inhalation)
Hydrogen peroxide	35% solution: 1193 mg/kg (rat) 50% solution: >225 mg/kg (rat) 70% solution: 1026 mg/kg (rat)	35% solution: >2000 mg/kg (rabbit) 50% solution: 170 mg/kg (rat 4-hr) 70% solution: 9200 mg/kg (rabbit)	LC50: 9400 mg/m <sup>3</sup> (mouse 5-15 min)

**Toxicologically Synergistic Products:** No data available  
**Skin:** Moderately irritating  
**Eye:** Corrosive, risk of serious damage to eyes  
**Inhalation:** Avoid breathing vapors or mists  
**Carcinogenicity:** The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	IARC	NTP	ACGIH	OSHA
Hydrogen Peroxide	Group 3	No Known	A3	X

**IARC (International Agency for Research on Cancer):** **Group 1** - Carcinogenic to humans  
**Group 2A** - Possibly carcinogenic to humans  
**Group 2B** - Possibly carcinogenic to humans  
**NTP (National Toxicity Program):** **Known** - Known carcinogen  
**Reasonably anticipated** - Reasonably anticipated to be a carcinogen  
**ACGIH (American Conference of Governmental Industrial Hygienists):** **A1** - Known human carcinogen  
**A2** - Suspected human carcinogen  
**A3** - Animal carcinogen



**Section 12: Ecological Information (non-mandatory)**

**Ecotoxicity:** Contains a substance which is toxic to aquatic organisms

Component	Freshwater Algae	Freshwater Fish	Microtox	Micro Flea
Hydrogen Peroxide	Algae Skeletonema Costatum EC 50 1.38 mg/L/72h	Fathead minnow (Pimephales promelas) LC50 = 16.4 mg/l/96h Rainbow Trout LC50 =12900-15300 mg/L; 96 H		Daphnia Magna EC50 = 7.7 mg/L/24h Daphnia magna NOEC = 0.63 mg/L/21d

**Persistence and degradability:** Hydrogen peroxide in the 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.

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

Component	log Pow
Hydrogen Peroxide	-1.5

**Section 13: Disposal Considerations (non-mandatory)**

**Disposal of Waste:** Disposal should be in accordance with applicable, regional, national and local laws and regulations. Can be disposed of as waste water, when in compliance with local regulations.

**US EPA Waste Number:** D001

**Contaminated Packaging:** Drums - Empty as thoroughly as possible. Triple rinse drums before disposal. Avoid contamination; impurities accelerate decomposition. Never return product to original container.

**Section 14: Transport Information (non-mandatory)**

**DOT:**

- UN/ID No: 2014



- **PSN:** HYDROGEN PEROXIDE, AQUEOUS SOLUTION
- **Hazard Class:** 5.1
- **Packaging group:** II
- **Subsidiary class:** 8

**TDG:**

- **UN/ID No:** 2014
- **PSN:** HYDROGEN PEROXIDE, AQUEOUS SOLUTION
- **Hazard Class:** 5.1
- **Packaging Group:** II
- **Subsidiary Class:** 8

**Air transport ICAO-TI and IATA-DGR:**

Air regulation permit shipment of Hydrogen Peroxide (<=40%) in non-vented containers for Air Cargo Only aircraft, as well as for Passenger and Cargo aircraft. HOWEVER, all PeroxyChem Hydrogen Peroxide containers are vented and therefore, air shipments of PeroxyChem H2O2 are not permitted. IATA air regulations state that venting of packages containing oxidizing substances is not permitted for air transport.

**IMDG**

- **UN/ID No:** 2014
- **PSN:** HYDROGEN PEROXIDE, AQUEOUS SOLUTION
- **Hazard Class:** 5.1
- **Packaging Group:** II
- **Subsidiary Class:** 8

**US EPA Waste Number:**

Protect from physical damage. Keep drums in upright position. Drums should not be stacked in transit. Do not store drums on wooden pallets.

**Section 15: Regulatory Information (non-mandatory)**

**US Federal Regulations**

**SARA Section 355 (extremely hazardous substances):**

Section 355 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the act and Title 40 of the Code of Federal Regulations, Part 372

**SARA Section 313 (specific toxic chemical listings):**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories:**



Acute health hazard **Yes**  
 Chronic health hazard **No**  
 Fire hazard **Yes**  
 Sudden release of pressure hazard **No**  
 Reactive hazard **No**

**CWA:**

This product as supplied does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA:**

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	SARA RQ
Hydrogen Peroxide		1000 lbs	

**International Inventories:**

Component	TSCA (USA)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)
Hydrogen Peroxide	X	X	X	X	X
Component	KECL (Korea)	PICCS (Philippines)	AICS (Australia)	NZIoC (New Zealand)	
Hydrogen Peroxide	X	X	X	X	

**Mexico:** Serious Risk- Grade 3  
**Canada:**

**WHMIS Hazard Class:** C - Oxidizing Materials  
 D1B - Toxic Materials  
 E - Corrosive material  
 F - Dangerously reactive material

**Section 16: Other Information**

<b>NFPA</b>	Health Hazard 3	Flammability 0	Stability 1	Special Hazards OX
<b>HMIS</b>	Health Hazard 3	Flammability 0	Physical Hazard 1	Special Precautions H

**NFPA/HMIS Hazard Rating:** Severe = 4  
 Serious = 3  
 Moderate = 2



Slight = 1  
Minimal = 0  
Special Hazards OX = Oxidizer  
Protection = H (Safety goggles, gloves, apron,  
the use of supplied air or SCBA respirator is  
required in lieu of a vapor cartridge respirator)

**Uniform Fire Code:**

Oxidizer: Class 2--liquid

**SDS date of preparation:** 1/20/2022

**SDS date of update:** 1/20/2022

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Remix Chemical and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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Remix  
[Chemicals]  
2 1 3 . 9 9 9 . 3 4 8 3