

## Hydrogen Peroxide 35% Reagent

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Hydrogen Peroxide 35% Reagent

**Synonyms/Generic Names:** Peroxide

**Product Number:** 2764

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI. 53925

**For More Information:** 920-623-2140 (Monday-Friday 8:00-4:30)  
[www.columbuschemical.com](http://www.columbuschemical.com)

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**Hazardous Not Otherwise Classified:** None

**Target Organs:** Respiratory system

**Signal Words:** Danger

**Pictograms:**



**GHS Classification**

Oxidizing liquids	Category 2
Acute toxicity, Oral	Category 4
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity, single exposure Respiratory tract irritation	Category 3
Chronic aquatic toxicity	Category 3

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

H272	May intensify fire; oxidizer.
H302	Harmful if swallowed
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary Statements:**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220	Keep/Store away from clothing and other combustible materials.
P221	Take any precaution to avoid mixing with combustibles.
P261	Avoid breathing gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use in a well ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330	IF SWALLOWED: Rinse mouth.
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/doctor/physician.
P370+P378	In case of fire: Use appropriate media to extinguish.
P403+P233	Store in a well ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

**Potential Health Effects**

<b>Eyes</b>	May cause serious damage.
<b>Inhalation</b>	Irritating to the respiratory system. Causes irritation to the respiratory tract.
<b>Skin</b>	Irritating to skin. Contact causes redness, burns, itching and pain. Prolonged or repeated skin exposure may cause dermatitis.
<b>Ingestion</b>	Causes irritation and pain.

**NFPA Ratings**

<b>Health</b>	3
<b>Flammability</b>	0
<b>Reactivity</b>	1
<b>Specific hazard</b>	OX

**HMIS Ratings**

<b>Health</b>	3
<b>Fire</b>	0
<b>Reactivity</b>	1

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Hydrogen Peroxide	34.5 – 35.5	7722-84-1	231-765-0	H <sub>2</sub> O <sub>2</sub>	34.01 g/mol
Water	Balance	7732-18-5	231-791-2	H <sub>2</sub> O	18.00 g/mol

**4. FIRST-AID MEASURES**

<b>Eyes</b>	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
<b>Inhalation</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. Exposure to material may cause delayed lung injury resulting in pulmonary edema and pneumonitis. Exposed individuals should be monitored for 72 hours after exposure for the onset of delayed respiratory symptoms.
<b>Skin</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.

<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.
<b>General Advice</b>	Get medical advice/attention if you feel unwell. Show safety data sheet to the doctor.

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## 5. FIREFIGHTING MEASURES

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<b>Suitable (and unsuitable) extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use flooding quantities of water to cool containers.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
<b>Specific hazards arising from the chemical</b>	Product components will burn producing oxygen. (See also Stability and Reactivity section).

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## 6. ACCIDENTAL RELEASE MEASURES

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<b>Personal precautions, protective equipment and emergency procedures</b>	Do not handle until all safety precautions have been read and understood. Do not get in eyes, on the skin, or on clothing. Do not breathe fume, mist or vapors. See section 8 for recommendations on the use of personal protective equipment. Emergency procedures shall be executed only by specialists or authorized personnel.
<b>Environmental precautions</b>	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
<b>Methods and materials for containment and cleaning up</b>	Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

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## 7. HANDLING AND STORAGE

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### Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not get in eyes, on the skin, or on clothing. Do not breathe fume, mist or vapors. See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store locked up. Isolate from combustible material. Store in the dark. Keep away from incompatible materials (see section 10 for incompatibilities).

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Hydrogen Peroxide	1 ppm (1.4 mg/m <sup>3</sup> )	TWA	ACGIH® TLVs®
	1 ppm (1.4 mg/m <sup>3</sup> )	TWA	OSHA PELs
	1 ppm (1.4 mg/m <sup>3</sup> )	TWA	NIOSH RELs

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit  
 PEL: Permissible Exposure Limit  
 STEL: Short Term Exposure Limit during x minutes.  
 IDLH: Immediately Dangerous to Life or Health  
 WEEL: Workplace Environmental Exposure Levels  
 CEIL: Ceiling

### Personal Protection

<b>Eyes</b>	Wear chemical safety glasses with a face shield for splash protection.
<b>Inhalation</b>	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
<b>Skin</b>	Wear neoprene or nitrile gloves, apron and other protective clothing appropriate to the risk of exposure.
<b>Other</b>	Handle in accordance with good industrial hygiene and safety practices.

### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless liquid
Odor	Not Available
Odor threshold	Not Applicable
pH	Not Available
Melting point/freezing point	-33°C (-27°F)
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	20 hPa at 20°C (68°F)
Vapor density	Not Available
Relative density	1.1960
Solubility (ies)	Completely soluble in water
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Applicable
Decomposition temperature	Not Available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Will not occur.
<b>Conditions to Avoid</b>	Store out of direct light.
<b>Incompatible Materials</b>	Metals, organic materials, reducing agents, metallic oxides, dusts, combustible materials, alkaline materials.
<b>Hazardous Decomposition Products</b>	Oxides of oxygen.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

Hydrogen Peroxide, CAS #7722-84-1

<b>Skin</b>	LD50 - Dermal – rat – >4060 mg/kg
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	LD50 - Dermal – pig– >2,000 mg/kg
<b>Eyes</b>	Not Available
<b>Respiratory (Vapors)</b>	LC50 Inhalation – rat – 2,000 – mg/m <sup>3</sup> - 4h
<b>Ingestion</b>	LD50 - Oral – mouse – 2,000 mg/kg

**Carcinogenicity**

<b>IARC</b>	3-Group 3: Not classifiable as to its carcinogenicity to humans (hydrogen peroxide).
<b>ACGIH</b>	A3: Confirmed animal carcinogen with unknown relevance to humans (hydrogen peroxide).
<b>NTP</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>OSHA</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Signs & Symptoms of Exposure**

<b>Skin</b>	May be absorbed! Skin discoloration. Swelling. Redness, burning, itching and pain
<b>Eyes</b>	Redness. Pain. Blurred vision. Corneal damage. Burns.
<b>Respiratory</b>	Sore throat, cough Dizziness. Headache. Nausea. Shortness of breath
<b>Ingestion</b>	Aspiration hazard! Sore throat. Abdominal pain. Abdominal distension. Shock or collapse.

<b>Chronic Toxicity</b>	Not Available
<b>Teratogenicity</b>	Not Available
<b>Mutagenicity</b>	Not Available
<b>Embryotoxicity</b>	Not Available
<b>Specific Target Organ Toxicity</b>	May cause respiratory irritation.
<b>Reproductive Toxicity</b>	Not Available
<b>Respiratory/Skin Sensitization</b>	Not Available

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

<b>Aquatic Vertebrate</b>	LC50 –Lepomis macrochirus (bluegill sunfish) – 0.35g – 96h
<b>Aquatic Invertebrate</b>	LC50 – Daphnia pulex (water flea) – 2.4 ppm – 48h
<b>Terrestrial</b>	Not Available
<b>Microorganisms</b>	Not Available

<b>Persistence and Degradability</b>	Not Available
<b>Bioaccumulative Potential</b>	Not Available
<b>Mobility in Soil</b>	Not Available
<b>PBT and vPvB Assessment</b>	Not Available
<b>Other Adverse Effects</b>	Not Available

**13. DISPOSAL CONSIDERATIONS**

<b>Waste Product or Residues</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
<b>Product Containers</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

## 14. TRANSPORTATION INFORMATION

US DOT	UN2014, Hydrogen peroxide, aqueous solutions 5.1, (8), pg II
TDG	UN2014, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS 5.1, (8), PG II
IMDG	UN2014, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS 5.1, (8), PG II
Marine Pollutant	No
IATA/ICAO	UN2014, Hydrogen peroxide, aqueous solutions 5.1, (8), pg II

## 15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Not Listed
Massachusetts: Toxic or Hazardous Substance List, Right to Know	Listed
New Jersey: Right to Know Hazardous Substance List	Listed
Pennsylvania: Hazardous Substance List	Listed
Rhode Island: Hazardous Substance List	Listed
SARA 302	Not Listed in concentration <52%
SARA 304	Not Listed in concentration <52%
SARA 311	Physical Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 312	Physical Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class C: Oxidizing material Class D-1B: Poisonous and infectious material- Immediate and serious effects- Toxic Material Class E: Corrosive material

## 16. OTHER INFORMATION

Revision	Date
Original	08/09/2022

Disclaimer: The information provided in this Safety Data Sheet ("SDS") is correct to the best of our knowledge, information and belief at the date of publication. The information in this SDS relates only to the specific Product identified under Section 1, and does not relate to its use in combination with other materials or products, or its use as to any particular process. Those handling, storing or using the Product should satisfy themselves that they have current information regarding the particular way the Product is handled, stored or used and that the same is done in accordance with federal, state and local law. WE DO NOT MAKE ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE. WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, INJURY, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT.