

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Hydrogen Peroxide 12% ACS Grade

Synonyms: hydrogen peroxide

CAS Number: 7722-84-1

Grade/Purity: ACS Grade

Product Type: Bases

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer/Supplier: Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574

Information: 512-365-6838 | www.alliancechemical.com

Emergency: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Danger

GHS Pictograms:



Hazard Statements:

H271	May cause fire or explosion; strong Oxidizer [Danger Oxidizing liquids; Oxidizing solids]
H302	Harmful if swallowed [Warning Acute toxicity, oral]
H314	Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]
H332	Harmful if inhaled [Warning Acute toxicity, inhalation]

Precautionary Statements:

P210,	P220, P260, P261, P264, P270, P271, P280, P283, P301+P317, P301+P330+P331, P302+P361+P354, P304+P340, P305+P354+P338, P306+P360, P316, P317, P321, P330, P363, P370+P378, P371+P380+P375, P405, P420, and P501
-------	--

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	WEIGHT %	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Hydrogen Peroxide	11.7-12.3%	7722-84-1	231-765-0	H ₂ O ₂	34.015 g/mol
Water	88.3%	7732-18-5	231-791-2	H ₂ O	18.02 g/mol

4. FIRST-AID MEASURES

Eyes	EYES: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. IMMEDIATELY transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.
Skin	SKIN: IMMEDIATELY flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. IMMEDIATELY call a hospital or poison control center even if no symptoms (such as redness or irritation) develop. IMMEDIATELY transport the victim to a hospital for treatment after washing the affected areas.
Inhalation	INHALATION: IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. If symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop, call a physician and be prepared to transport the victim to a hospital. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used; if not available, use a level of protection greater than or equal to that advised under Protective Clothing.
Ingestion	INGESTION: DO NOT INDUCE VOMITING. Corrosive chemicals will destroy the membranes of the mouth, throat, and esophagus and, in addition, have a high risk of being aspirated into the victim's lungs during vomiting which increases the medical problems. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and IMMEDIATELY call a hospital or poison control center. IMMEDIATELY transport the victim to a hospital. If the victim is convulsing or unconscious, do not give anything by mouth, ensure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING. Transport the victim IMMEDIATELY to a hospital. (NTP, 1992)

5. FIRE-FIGHTING MEASURES

Suitable Media	Water spray or fog in large quantities. Do NOT use dry chemical or CO ₂ .
Unsuitable Media	Do not use dry chemical, CO ₂ , or foam.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Combustion Products	May include carbon oxides and other toxic fumes. See Section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental	Prevent leakage or spillage from entering drains, sewers, or waterways.
Containment & Cleanup	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

7. HANDLING AND STORAGE

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area away from combustible materials and heat. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

Occupational Exposure Limits:

AGENCY	EXPOSURE LIMIT
OSHA PEL	1 ppm TWA
NIOSH REL	1 ppm TWA
IDLH	75 ppm

Eyes	Wear chemical safety goggles or face shield.
Skin	Wear chemical-resistant gloves and protective clothing.
Inhalation	Use a NIOSH-approved respirator (N95/P100 for particulate, organic vapor or acid gas cartridge as appropriate to the substance) when exposure limits may be exceeded or visible mist or dust is generated.

Exposure limits sourced from NIOSH Pocket Guide and OSHA 29 CFR 1910.1000. Hazard classification from ECHA Classification and Labelling Inventory (CLP Annex VI).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, pale blue liquid with transparent quality
Odor	Characteristic
pH	Not Available
Melting Point	-0.43°C (31.2°F)
Boiling Point	150.2°C (302.4°F)
Flash Point	54°C (129.2°F)
Vapor Pressure	Not Available
Specific Gravity	1.035
Solubility	Fully miscible with water, polar organic solvents
Molecular Formula	H ₂ O ₂
Molecular Weight	34.015 g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Combustible materials, reducing agents, organic materials.
Decomposition Products	May produce carbon oxides and other toxic fumes when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Data not available. Avoid release to the environment.
Persistence	Not Available
Bioaccumulation	Not Available
Mobility in Soil	Not Available

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14. TRANSPORT INFORMATION

US DOT	UN2984, Hydrogen peroxide, aqueous solution, 5.1, PG III
IMDG	UN2984, Hydrogen peroxide, aqueous solution, 5.1, PG III
IATA/ICAO	UN2984, Hydrogen peroxide, aqueous solution, 5.1, PG III
Marine Pollutant	No

15. REGULATORY INFORMATION

TSCA Inventory	All ingredients are listed on the TSCA Active inventory.
California Prop 65	Refer to California Proposition 65 list for current status.
SARA 311/312	See Section 2 for hazard classifications.
SARA 313	Refer to EPA Toxic Release Inventory for current listing status.

16. OTHER INFORMATION

Revision Date: 04/29/2026

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge at the date of publication. It relates only to the specific product identified and does not relate to its use in combination with other materials. ALLIANCE CHEMICAL MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLIANCE CHEMICAL DOES NOT ASSUME LIABILITY FOR LOSS, INJURY, DAMAGE, OR EXPENSE ARISING FROM THE HANDLING, STORAGE, USE, OR DISPOSAL OF THIS PRODUCT.