

Hydrogen Peroxide

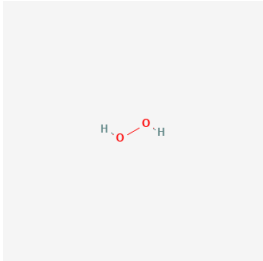
5% Technical Grade

Technical Grade · 5%

Standard
OSHA HCS 2024 · GHS Rev. 7

Reviewed
2026-07-17

Emergency
Chemtel 1-800-255-3924 (24/7)

CAS number 7722-84-1		 Structure · PubChem
Grade Technical Grade · 5%	Signal word Warning	
Hazards Irritant / harmful H319		

1 Identification

Product Identifier	Hydrogen Peroxide 5% Technical Grade
Grade	Technical Grade
Concentration	5%
CAS Number	7722-84-1
Chemical Formula	H ₂ O ₂
Manufacturer	Alliance Chemical 204 South Edmond Street, Taylor, TX 76574
Emergency Phone	Chemtel 1-800-255-3924 (24/7)
Recommended Use	Industrial / laboratory chemical. See Section 7.
Restrictions on Use	No restrictions identified beyond the conditions of safe use in Sections 7 and 8.

2 Hazard Identification



Irritant /
harmful

Classification	Serious eye damage/eye irritation, Category 2A
Signal Word	Warning
Hazard Statements	H319 Causes serious eye irritation
Precautionary Statements	P264 Wash hands and face thoroughly after handling. P280 Wear protective gloves, protective clothing, and eye/face protection. 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 or attention.

Classification, hazard (H) and precautionary (P) statements and pictograms per OSHA HCS 2024 (29 CFR 1910.1200, Appendices A–C), aligned with GHS Rev. 7.

3 Composition / Information on Ingredients

Component	CAS No.	Formula	Concentration
Hydrogen Peroxide 5% Technical Grade	7722-84-1	H2O2	5% (w/w)

Concentrations are nominal; lot-specific values appear on the Certificate of Analysis. Components not contributing to classification are omitted.

4 First-Aid Measures

Eyes	Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Wash with soap. Get medical attention immediately.
Inhalation	Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not

Ingestion	breathing, give artificial respiration. Get medical attention immediately.
Most Important Symptoms and Effects	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.
Immediate Medical Attention and Special Treatment	Eye contact causes irritation: redness, pain and tearing. Treat symptomatically. Get medical attention if symptoms develop or persist.

5 Fire-Fighting Measures

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical, or CO2. Use measures appropriate to local circumstances.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.
Specific Hazards Arising from the Chemical	Containers may rupture when heated.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Hazardous Combustion Products	Oxygen, which may intensify fire.

6 Accidental Release Measures

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental Precautions	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. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.

8 Exposure Controls / Personal Protection

Occupational Exposure Limits

Limit	Value
OSHA PEL	1 ppm TWA
NIOSH REL	1 ppm TWA
IDLH	75 ppm

Engineering Controls	Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.
Eye/Face Protection	Wear chemical safety goggles or face shield.
Skin Protection	Wear chemical-resistant gloves and protective clothing.
Respiratory Protection	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

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 & Chemical Properties

Appearance	Clear, colorless liquid
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Odor	... Slightly sharp odor ...
Odor Threshold	No data available
pH	Weak acid; H ₂ O ₂ concn wt% = 35, 50, 70, 90; corresponding true pH: 4.6, 4.3, 4.4, 5.1
Melting Point / Freezing Point	Not characterized for the 5% solution
Boiling Point	100 °C (212 °F) (aqueous solution)
Flash Point	not applicable
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Upper/Lower Flammability or Explosive Limits	No data available
Vapor Pressure	1 mmHg at 59.5 °F (NTP, 1992)
Vapor Density	No data available
Relative Density	1.02
Solubility	greater than or equal to 100 mg/mL at 72 °F (NTP, 1992)
Partition Coefficient (n-octanol/water)	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Particle Characteristics	Not applicable
Form	Liquid
Density	1.02 (5% w/w aqueous solution, 20 °C)

Values shown reflect product-specific canonical data. Lot-specific ranges may vary; see the Certificate of Analysis for the shipped lot.

10 Stability and Reactivity

Reactivity	Not reactive under normal conditions of use and storage.
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Strong oxidizing agents, strong acids, strong bases.
Hazardous Decomposition Products	Oxygen, which may intensify fire.

11 Toxicological Information

See Section 2 for GHS hazard classification.

Likely Routes of Exposure	Inhalation, skin contact, eye contact, ingestion.
Symptoms	Eye contact causes irritation: redness, pain and tearing.
Delayed and Chronic Effects	No delayed or chronic effects identified beyond the classification in Section 2.
Numerical Measures of Toxicity	No data available

Carcinogen Classification

Agency	Status
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IARC	Group 3 — not classifiable as to its carcinogenicity to humans (Hydrogen peroxide; IARC agent: Hydrogen peroxide, Vol. 36, Sup 7, 71).
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NTP	Not listed as carcinogen.
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OSHA	Not listed as carcinogen.
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12 Ecological Information

Ecotoxicity	Data not available. Avoid release to the environment.
Persistence & Degradability	Not Available
Bioaccumulative Potential	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

Not regulated for transport under US DOT 49 CFR Subchapter C, IMDG, or IATA DGR.

15 Regulatory Information

Inventory / List	Status
California Proposition 65	Not listed
US EPA TSCA Active Inventory	Listed
EPCRA SARA 313 (TRI)	Not listed

SARA 311/312 hazard categories correspond to the GHS classification in Section 2. Data retrieved as of: California Proposition 65 2026-10-02; US EPA TSCA Active Inventory 2026-10-02; EPCRA SARA 313 (TRI) 2026-10-02.

16 Other Information

Revision Date	2026-10-05
Format	16-section format per OSHA HCS 2024 (29 CFR 1910.1200, Appendix D), aligned with GHS Rev. 7.

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