

PRODUCT IDENTIFICATION



Product Name: Hydrogen Peroxide 30% Technical

CAS Number: 7722-84-1

Molecular Formula: H₂O₂

Molecular Weight: 34.015 g/mol

Grade: Technical Grade

Purity / Concentration: 30%

Synonyms: H₂O₂ 30%, Peroxide Solution 30%

PRODUCT OVERVIEW

Alliance Chemical offers high-quality Hydrogen Peroxide 30% Technical Grade, a powerful oxidizing agent essential for industrial applications. This clear, colorless liquid maintains a precise assay of 30.34% and features exceptionally low trace metal impurities, such as iron levels at 0.0005 ppm, ensuring consistent performance in sensitive chemical processes.

Grade Significance: Technical Grade indicates that this product is formulated for industrial and manufacturing utility where high purity is required, though it is not intended for pharmaceutical or food-grade applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (Permanganate)	%	30.34	29	31	Permanganate Titration
Residue On Evaporation	ppm	17	0	50	Evaporation
Aluminum Al	ppm	0.015	0	0.05	ICP-MS
Arsenic Antimony As As	ppm	0.0030	0	0.01	ICP-MS
Calcium Ca	ppm	0.3	0	1	ICP-MS
Iron	ppm	0.0005	0	0.0010	ICP
Lead Pb	ppm	0.015	0	0.05	ICP-MS
Magnesium Mg	ppm	0.03	0	0.1	ICP-MS
Manganese	ppm	0.0030	0	0.01	ICP
Nickel Ni	ppm	0.015	0	0.05	ICP-MS
Potassium K	ppm	0.3	0	1	ICP-MS
Sodium Na	ppm	0.3	0	1	ICP-MS
Zinc Zn	ppm	0.03	0	0.1	ICP-MS
Chloride Cl	ppm	15	0	50	ICP
Phosphate Po ₄	%	0.015	0	0.05	ICP
Sulfate So ₄	%	0.0090	0	0.03	ICP
Boron B	ppm	0.03	0	0.1	ICP-MS
Silicon Si	ppm	0.03	0	0.1	ICP-MS
Tin Sn	ppm	0.03	0	0.1	ICP-MS

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Odor	Slightly sharp, pungent odor
Form	Liquid	Boiling Point	Not characterized for the 30% solution
Melting / Freezing Point	Not characterized for the 30% solution	Specific Gravity	1.11
Solubility	Soluble in water, slightly soluble in organic solvents	Molecular Formula	H ₂ O ₂
Molecular Weight	34.015 g/mol	Vapor Pressure (20°C)	5 mmHg
Viscosity (25°C)	1.2 cP	Refractive Index (20°C)	1.406
Density (25°C)	1.11 g/mL		

APPLICATIONS

1. **Textile Manufacturing** — Used as a primary bleaching agent to whiten fabrics and remove natural pigments before dyeing.
2. **Pulp and Paper** — Applied in the pulp bleaching process to improve paper brightness without the environmental impact of chlorine-based bleaches.
3. **Water Treatment** — Functions as a strong oxidant to neutralize contaminants, remove odors, and break down organic pollutants in industrial wastewater.
4. **Chemical Synthesis** — Serves as a versatile reagent in organic synthesis and laboratory procedures requiring controlled oxidation.
5. **Environmental Remediation** — Utilized for in-situ chemical oxidation to treat groundwater and soil contaminated with organic compounds.

STORAGE & HANDLING

Hydrogen Peroxide is a potent oxidizer that must be stored in a cool, well-ventilated area away from incompatible materials like organics and metals to prevent decomposition. Proper storage is critical to avoid pressure buildup and fire hazards, as the chemical can intensify fires if stored improperly.

- Store in a cool, dry place away from direct sunlight and heat sources.
- Use containers made of HDPE or glass to prevent reactions with metals.
- Avoid contact with organic materials and reducing agents to prevent violent reactions.
- Ensure proper ventilation when handling to minimize inhalation exposure.
- Wear appropriate personal protective equipment (PPE) including gloves and goggles.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 15 Gallon
- 55 Gallon
- 275 Gallon
- 330 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H272: May intensify fire; oxidiser
- H302: Harmful if swallowed
- H314: Causes severe skin burns and eye damage
- H332: Harmful if inhaled
- H335: May cause respiratory irritation

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

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

Alliance Chemical | 204 South Edmond St, Taylor, Texas 76574 | 512-365-6838 | www.alliancechemical.com

Disclaimer: The information contained herein is believed to be accurate and represents the best information currently available to us. However, Alliance Chemical makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.