

PRODUCT IDENTIFICATION



Product Name: Hydrogen Peroxide 30% Technical

CAS Number: 7722-84-1

Molecular Formula: H_2O_2

Molecular Weight: 34.015 g/mol

Grade: Technical

Purity / Concentration: 30%

Synonyms: H_2O_2 30%, Peroxide Solution 30%

PRODUCT OVERVIEW

Hydrogen Peroxide 30% Technical is a high-purity oxidizing agent ideal for industrial applications requiring consistent chemical performance. This solution features a precise 30.3% assay and low impurity levels, such as iron at 0.2 ppm, making it a reliable reagent for synthetic and analytical procedures.

Grade Significance: Technical grade indicates that this product is manufactured to meet industrial standards for chemical purity and consistency, providing a cost-effective solution for manufacturing and processing needs.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	30.3	29	31	Titration with KMnO_4
Color (APHA)	APHA	10	—	20	ASTM D1209
Specific Gravity (20°C)	g/mL	1.11	1.1	1.12	Hydrometer
Residue After Ignition	%	0.0050	—	0.02	Gravimetric
Heavy Metals (as Pb)	ppm	0.1	—	1	ICP-OES
Iron (Fe)	ppm	0.2	—	1	ICP-OES
Chloride (Cl^-)	ppm	0.1	—	1	Ion Chromatography
Nitrate (NO_3^-)	ppm	0.2	—	2	Ion Chromatography
Phosphate (PO_4^{3-})	ppm	0.2	—	2	Spectrophotometry
Acidity As H_2SO_4	ppm	50	—	100.0	Titration with NaOH

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 solution
Melting / Freezing Point	Not characterized for the 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

- Textile Manufacturing** — Used as an effective bleaching agent to whiten fabrics and remove natural pigments before dyeing.
- Pulp and Paper** — Serves as a critical component in the bleaching process to achieve high brightness levels in paper products.
- Water Treatment** — Applied to oxidize and remove organic contaminants and odors, ensuring cleaner effluent discharge.
- Chemical Synthesis** — Acts as a powerful oxidizing reagent in various organic and inorganic chemical manufacturing reactions.
- Analytical Laboratories** — Utilized as a reagent in specialized testing procedures requiring a stable and verified concentration of peroxide.

STORAGE & HANDLING

Due to its status as a strong oxidizer, this product must be stored in a cool, well-ventilated area away from combustible materials to prevent fire hazards. Proper storage prevents decomposition and ensures the solution remains stable, protecting both the integrity of the chemical and the safety of your facility.

- 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:

- 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]

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.

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