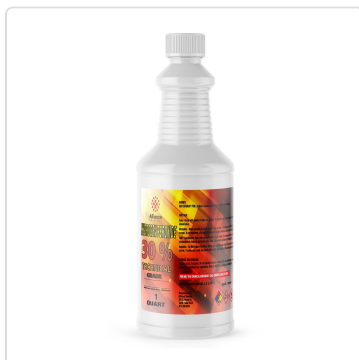


PRODUCT IDENTIFICATION



Product Name: Hydrogen Peroxide 30% Technical

CAS Number: 7722-84-1

Molecular Formula: H₂O₂

Molecular Weight: 34.015 g/mol

Grade: Technical

Purity / Concentration: 30%

Synonyms: H₂O₂ 30%, Peroxide Solution 30%

PRODUCT OVERVIEW

Alliance Chemical's Hydrogen Peroxide 30% Technical Grade is a clear, colorless liquid, characterized by an assay of 30.3% and a specific gravity of 1.11 g/mL. As a strong oxidizing agent, it is commonly utilized in various chemical reactions. This product is essential in applications requiring a potent oxidizer.

Grade Significance: Technical grade hydrogen peroxide is suitable for industrial applications where high purity is not the primary requirement. While it meets specific quality standards, it may contain trace impurities that do not affect its performance in intended technical applications such as bleaching and water treatment.

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 ₂ SO 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	150°C (302°F)
Melting / Freezing Point	-0°C (31°F)	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 Industry** — Hydrogen Peroxide 30% Technical is widely used for bleaching textiles, removing natural pigments and dyes to prepare fabrics for further processing and coloration. Its strong oxidizing properties ensure effective whitening and stain removal.
- Paper Industry** — In the paper industry, this grade of hydrogen peroxide serves as a bleaching agent for wood pulp and recycled paper. It enhances the brightness and whiteness of paper products, improving their marketability.
- Water Treatment** — Hydrogen Peroxide 30% Technical is employed in water treatment facilities to oxidize and remove organic and inorganic contaminants. It effectively eliminates pollutants and improves water quality, making it safe for various applications.
- Chemical Synthesis** — This product acts as a crucial reagent in numerous chemical syntheses, providing a source of active oxygen for oxidation reactions. Its controlled reactivity allows for the precise synthesis of various chemical compounds.
- Analytical Chemistry** — Hydrogen Peroxide 30% Technical is utilized in analytical procedures, such as titrations and redox reactions, for quantitative analysis. It aids in determining the concentration of various substances in a sample.
- Environmental Remediation** — It can be used in environmental remediation efforts to break down pollutants in soil and water. Its oxidative properties help to degrade harmful substances into less toxic compounds, contributing to environmental cleanup.

STORAGE & HANDLING

Proper storage of Hydrogen Peroxide 30% Technical Grade is crucial due to its potential to cause fire or explosion as a strong oxidizer. It should be stored in a cool, dry, and well-ventilated area, away from incompatible materials, to prevent dangerous reactions and maintain its stability. Exposure to heat and contaminants can accelerate decomposition, increasing the risk of hazardous situations.

- 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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