

PRODUCT IDENTIFICATION



Product Name: Hydrogen Peroxide 6% Technical Grade

CAS Number: 7722-84-1

Molecular Formula: H_2O_2

Molecular Weight: 34.015 g/mol

Grade: Technical Grade

Purity / Concentration: 6%

Synonyms: Hydrogen Dioxide, Peroxide Solution

PRODUCT OVERVIEW

Alliance Chemical offers 6% Technical Grade Hydrogen Peroxide, a reliable oxidizing agent characterized by high purity levels with trace metals like Iron at 0.0005 ppm. This stable, transparent liquid is essential for industrial processes requiring consistent chemical performance and oxidation capabilities.

Grade Significance: Technical Grade signifies that this product is manufactured for industrial and commercial utility where consistent chemical performance is required, rather than for pharmaceutical or food-grade applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (Permanganate)	%	6.07	5.5	6.5	Permanganate Titration
Residue On Evaporation	ppm	3	0	50	Evaporation
Aluminum Al	ppm	0.0030	0	0.01	ICP-MS
Arsenic Antimony As As	ppm	0.0006	0	0.0020	ICP-MS
Calcium Ca	ppm	0.06	0	0.2	ICP-MS
Iron	ppm	0.0005	0	0.0010	ICP
Lead Pb	ppm	0.0030	0	0.01	ICP-MS
Magnesium Mg	ppm	0.0060	0	0.02	ICP-MS
Manganese	ppm	0.0010	0	0.0020	ICP
Nickel Ni	ppm	0.0030	0	0.01	ICP-MS
Potassium K	ppm	0.06	0	0.2	ICP-MS
Sodium Na	ppm	0.06	0	0.2	ICP-MS
Zinc Zn	ppm	0.0060	0	0.02	ICP-MS
Chloride Cl	ppm	3	0	10	ICP
Phosphate Po4	%	0.0030	0	0.01	ICP
Sulfate So4	ppm	18	0	60	ICP
Boron B	ppm	0.0060	0	0.02	ICP-MS
Silicon Si	ppm	0.0060	0	0.02	ICP-MS
Tin Sn	ppm	0.0060	0	0.02	ICP-MS

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Transparent, pale blue liquid	Odor	Slightly sharp, pungent odor
Form	Liquid	Boiling Point	Not characterized for the 6% solution
Melting / Freezing Point	Not characterized for the 6% solution	Specific Gravity	1.02
Solubility	Fully miscible with water	Molecular Formula	H ₂ O ₂
Molecular Weight	34.015 g/mol	Vapor Pressure (20°C)	0.23 mmHg
Viscosity (25°C)	1.12 cP	Refractive Index (20°C)	1.406
Density (25°C)	1.010 g/mL		

APPLICATIONS

- 1. Water Treatment** — Utilized as an effective oxidant to neutralize pollutants and remove organic contaminants from industrial wastewater streams.
- 2. Textile Manufacturing** — Acts as a primary bleaching agent to achieve desired fabric brightness without compromising the integrity of the textile fibers.
- 3. Pulp and Paper** — Used in the bleaching process to improve the whiteness and quality of paper products during manufacturing.
- 4. Analytical Chemistry** — Serves as a high-quality reagent for laboratory analysis and various controlled chemical reaction pathways.

STORAGE & HANDLING

Proper storage is critical to prevent decomposition and maintain the concentration of the solution, which can release pressure if stored improperly. Because this product causes serious eye irritation, it must be kept in a cool, ventilated area away from incompatible materials to ensure workplace safety.

- Store in a cool, dry place away from direct sunlight.
- Use containers made of HDPE or glass to prevent reactions.
- Avoid contact with organic materials and reducing agents.
- Ensure proper ventilation in storage areas.
- Use personal protective equipment (PPE) such as gloves and goggles when handling.

AVAILABLE PACKAGING

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

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: Warning



Hazard Statements:

- H319: Causes serious eye 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.

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