TECHNICAL DATA SHEET

Hydrogen Peroxide 15% Technical Grade

Revised: 07/22/2026

PRODUCT IDENTIFICATION

Product Name: Hydrogen Peroxide 15% Technical Grade
CAS Number: 7722-84-1
Molecular Formula: H_2O_2
Molecular Weight: 34.015 g/mol
Grade: Technical Grade
Purity / Concentration: 15%
Synonyms: H2O2 15%, Hydrogen Peroxide Solution 15%

PRODUCT OVERVIEW

Hydrogen Peroxide 15% Technical Grade is a versatile, high-purity oxidizing agent ideal for industrial manufacturing and processing applications. Featuring an assay of 15.3% and exceptional clarity at 5 APHA, this solution is engineered for consistent performance in chemical synthesis and water treatment.

Grade Significance: Technical Grade indicates that this product is formulated for industrial and manufacturing utility where performance and chemical reliability are prioritized over food or pharmaceutical standards.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (Permanganate)	%	15.17	14.5	15.5	Permanganate Titration
Residue On Evaporation	ppm	9	0	50	Evaporation
Aluminum Al	ppm	0.0075	0	0.025	ICP-MS
Arsenic Antimony As As	ppm	0.0015	0	0.0050	ICP-MS
Calcium Ca	ppm	0.15	0	0.5	ICP-MS
Iron	ppm	0.0005	0	0.0010	ICP
Lead Pb	ppm	0.0075	0	0.025	ICP-MS
Magnesium Mg	ppm	0.015	0	0.05	ICP-MS
Manganese	ppm	0.0020	0	0.0050	ICP
Nickel Ni	ppm	0.0075	0	0.025	ICP-MS
Potassium K	ppm	0.15	0	0.5	ICP-MS
Sodium Na	ppm	0.15	0	0.5	ICP-MS
Zinc Zn	ppm	0.015	0	0.05	ICP-MS
Chloride Cl	ppm	8	0	25	ICP
Phosphate Po4	%	0.0075	0	0.025	ICP
Sulfate So4	%	0.0045	0	0.015	ICP
Boron B	ppm	0.015	0	0.05	ICP-MS
Silicon Si	ppm	0.015	0	0.05	ICP-MS
Tin Sn	ppm	0.015	0	0.05	ICP-MS

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	**Odor**	Slightly sharp, acrid odor
Form	Liquid	**Boiling Point**	Not characterized for the 15% solution
Melting / Freezing Point	Not characterized for the 15% solution	**Specific Gravity**	1.05
Solubility	Miscible with water, soluble in many organic solvents	**Molecular Formula**	H_2O_2
Molecular Weight	34.015 g/mol	**Vapor Pressure (20°C)**	0.23 mmHg
Viscosity (25°C)	1.2 cP	**Refractive Index (20°C)**	1.406
Density (25°C)	1.11 g/mL	**Partition Coefficient (log P)**	-0.7
Decomposition Temp.	Not applicable at standard conditions		

APPLICATIONS

1. **Textile Manufacturing** — Utilized as an effective bleaching agent to brighten fabrics and prepare fibers for uniform dyeing.
2. **Water Treatment** — Acts as a powerful oxidant to neutralize contaminants and improve the quality of industrial process water.
3. **Chemical Synthesis** — Serves as a reliable reagent in the production of various organic compounds, facilitating precise chemical reactions.
4. **Industrial Cleaning** — Employed in heavy-duty cleaning formulations where strong oxidation is required to break down organic buildup.

STORAGE & HANDLING

As a strong oxidizer, Hydrogen Peroxide 15% must be stored in a cool, well-ventilated area away from incompatible organic materials to prevent fire or explosion risks. Proper containment is essential to prevent severe skin burns and eye damage, ensuring the safety of your facility and personnel.

- 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 when handling to minimize inhalation risks.
- 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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