

PRODUCT IDENTIFICATION

**Product Name:** Phosphoric Acid 45% Technical Grade**CAS Number:** 7664-38-2**Molecular Formula:** $\text{H}_3\text{O}_4\text{P}$ **Molecular Weight:** 97.995 g/mol**Grade:** Technical Grade**Purity / Concentration:** 45%**Synonyms:** Not Available

PRODUCT OVERVIEW

Alliance Chemical offers Phosphoric Acid 45% Technical Grade, a clear and slightly viscous liquid essential for various industrial and laboratory applications. With a specific gravity of 1.289, this solution provides reliable concentration for processes requiring controlled acidity and chemical synthesis.

Grade Significance: Technical Grade indicates that this product is manufactured for industrial use rather than food or pharmaceutical consumption, focusing on cost-effective performance for manufacturing and laboratory tasks.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, slightly viscous liquid	Form	Liquid
Boiling Point	158°C (85%)	Melting / Freezing Point	21°C (pure)
Specific Gravity	1.289	Solubility	Fully miscible with water
Molecular Formula	$\text{H}_3\text{O}_4\text{P}$	Molecular Weight	97.995 g/mol

APPLICATIONS

- Metal Treatment** — Used as a key component in metal cleaning and rust removal processes to prepare surfaces for painting or coating.
- Water Treatment** — Functions as a pH adjuster in industrial water systems to prevent scale formation and corrosion within piping.
- Laboratory Research** — Serves as a standard reagent for chemical synthesis and analytical testing where precise pH control is required.
- Textile Manufacturing** — Applied in the dyeing and finishing of fabrics to ensure proper color fixation and fabric texture.
- Chemical Manufacturing** — Acts as a versatile catalyst or precursor in the production of various phosphate-based chemical compounds.

STORAGE & HANDLING

Proper storage is critical because this acid is corrosive to many metals and can cause severe skin burns or eye damage. It should be kept in original, compatible containers in a well-ventilated area to maintain stability and prevent accidental exposure or hazardous reactions.

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:

- H290: May be corrosive to metals
- H314: Causes severe skin burns and eye damage

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.