

PRODUCT IDENTIFICATION



Product Name: Phosphoric Acid 45% Food Grade

CAS Number: 7664-38-2

Molecular Formula: H_3O_4P

Molecular Weight: 97.995 g/mol

Grade: Food Grade

Purity / Concentration: 45%

Synonyms: Not Available

PRODUCT OVERVIEW

Alliance Chemical offers high-quality Phosphoric Acid 45% Food Grade, a clear and slightly viscous liquid essential for various industrial and laboratory processes. This precise concentration ensures consistent chemical performance while meeting strict purity standards required for sensitive applications.

Grade Significance: Food Grade certification ensures the product meets rigorous purity standards, providing the end user with assurance that it is free from harmful contaminants and suitable for sensitive industrial or food-related applications.

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	H_3O_4P	Molecular Weight	97.995 g/mol

APPLICATIONS

- Food and Beverage** — Used as an acidulant to provide a tart, tangy flavor in colas and other processed beverages.
- Water Treatment** — Acts as a sequestering agent to prevent pipe corrosion and control mineral scaling in municipal water systems.
- Dairy Processing** — Utilized as a cleaning agent in clean-in-place (CIP) systems to effectively remove mineral deposits and milk stone from equipment.
- Laboratory Research** — Serves as a reliable reagent for pH adjustment and chemical synthesis in analytical laboratory environments.
- Metal Finishing** — Functions as a critical component in metal cleaning and phosphate coating processes to improve corrosion resistance.

STORAGE & HANDLING

Proper storage is critical because this product is classified as a corrosive substance capable of causing severe skin burns and eye damage. It must be kept in a cool, well-ventilated area in its original, sealed container to prevent accidental exposure and structural degradation of storage materials.

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:

- H314: Causes severe skin burns and eye damage [Danger Skin corrosion/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.

Alliance Chemical | 204 South Edmond St, Taylor, Texas 76574 | 512-365-6838 | www.alliancechemical.com

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