

PRODUCT IDENTIFICATION

**Product Name:** Phosphoric Acid 50% Food Grade**CAS Number:** 7664-38-2**Molecular Formula:** $\text{H}_3\text{O}_4\text{P}$ **Molecular Weight:** 97.995 g/mol**Grade:** Food Grade**Purity / Concentration:** 50%**Synonyms:** Not Available

PRODUCT OVERVIEW

Phosphoric Acid 50% Food Grade is a high-purity, clear, viscous liquid essential for diverse manufacturing and laboratory applications. With a concentration of 50%, this reagent provides consistent acidity and chemical stability for precise formulations.

Grade Significance: Food Grade designation ensures that the product meets stringent purity standards, making it safe for use in processes involving consumables or sensitive industrial applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, viscous liquid	Form	Liquid
Boiling Point	158°C (85%)	Melting / Freezing Point	21°C (pure)
Specific Gravity	1.329	Solubility	Fully miscible with water
Molecular Formula	$\text{H}_3\text{O}_4\text{P}$	Molecular Weight	97.995 g/mol

APPLICATIONS

- Food and Beverage** — Used as a food-grade acidulant to provide a sharp, clean tartness in soft drinks and various processed food products.
- Water Treatment** — Functions as a sequestering agent to control pH levels and prevent the corrosion of metal pipes in municipal water systems.
- Laboratory Research** — Serves as a reliable reagent for pH adjustment and chemical synthesis in analytical and experimental laboratory settings.
- Metal Finishing** — Utilized in metal cleaning and phosphatizing processes to remove rust and prepare surfaces for protective coatings.
- Agriculture** — Employed as a key component in the production of fertilizers to provide essential phosphorus nutrients for crop development.

STORAGE & HANDLING

Proper storage is critical because this acid is corrosive to metals and can cause severe skin and eye damage. Keeping the product in its original, compatible container in a cool, well-ventilated area prevents accidental reactions and maintains the integrity of the chemical.

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.

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