

### PRODUCT IDENTIFICATION



**Product Name:** Phosphoric Acid 50% Food Grade

**CAS Number:** 7664-38-2

**Molecular Formula:**  $H_3O_4P$

**Molecular Weight:** 97.995 g/mol

**Grade:** Food Grade

**Purity / Concentration:** 50%

**Synonyms:** Not Available

### PRODUCT OVERVIEW

Alliance Chemical offers high-quality Phosphoric Acid 50% in a Food Grade concentration, ensuring consistent performance for sensitive processing needs. This clear, viscous liquid is manufactured to meet rigorous purity standards, making it a versatile choice for various industrial and laboratory applications.

**Grade Significance:** Food Grade designation ensures that the product meets stringent purity requirements and is manufactured to be free from harmful contaminants, making it safe for use in processes that may involve human consumption.

### CERTIFICATE OF ANALYSIS — TYPICAL VALUES

*Certificate of Analysis data not available for this product.*

### PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, viscous liquid	<b>Form</b>	Liquid
<b>Boiling Point</b>	158°C (85%)	<b>Melting / Freezing Point</b>	21°C (pure)
<b>Specific Gravity</b>	1.329	<b>Solubility</b>	Fully miscible with water
<b>Molecular Formula</b>	$H_3O_4P$	<b>Molecular Weight</b>	97.995 g/mol

### APPLICATIONS

- Food and Beverage** — Used as a pH regulator and acidulant to provide a sharp, tangy flavor profile in sodas and processed foods.
- Water Treatment** — Functions as a sequestering agent to prevent corrosion and scale buildup in municipal and industrial water distribution systems.
- Dairy Processing** — Utilized as a highly effective cleaning agent for removing mineral deposits and milk stone from stainless steel equipment.
- Metal Finishing** — Acts as a critical component in metal cleaning and phosphate coating processes to improve paint adhesion and corrosion resistance.
- Laboratory Research** — Serves as a reagent for chemical synthesis and analytical testing where precise pH control is required.

### STORAGE & HANDLING

Proper storage is essential because Phosphoric Acid 50% is highly corrosive and can cause severe skin burns and eye damage upon contact. It must be stored in a cool, well-ventilated area in compatible containers to prevent material degradation and ensure worker safety.

## 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.*

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