

## PRODUCT IDENTIFICATION



**Product Name:** 75% Vinegar  
**CAS Number:** 64-19-7  
**Molecular Formula:** C<sub>2</sub>H<sub>4</sub>O<sub>2</sub>  
**Molecular Weight:** 60.05 g/mol  
**Grade:** Food Grade  
**Purity / Concentration:** 75%  
**Synonyms:** Acetic Acid Solution, Vinegar Concentrate

## PRODUCT OVERVIEW

Alliance Chemical offers high-purity 75% Vinegar, a versatile food-grade acetic acid solution characterized by its exceptional clarity and a low impurity profile, including heavy metals at just 0.1 ppm. This concentrated liquid is expertly formulated for precise acidity control and microbial inhibition in large-scale food production.

**Grade Significance:** Food Grade certification ensures that this acetic acid meets stringent safety and purity standards, guaranteeing it is free from harmful contaminants and safe for direct use in food and beverage manufacturing.

## CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	75.3	74	76	Titration with NaOH
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	1.07	1.068	1.072	USP <841>
Residue After Ignition	%	0.0020	—	0.01	FCC Method
Heavy Metals (as Pb)	ppm	0.1	—	1	USP <231>
Chloride (Cl <sup>-</sup> )	ppm	0.2	—	5	USP <221>
Sulfate (SO <sub>4</sub> <sup>2-</sup> )	ppm	0.5	—	10	USP <221>
Appearance	—	Clear, colorless liquid	—	—	Visual

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

## PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, viscous liquid with acidic transparency	<b>Odor</b>	Pungent, vinegar-like odor
<b>Form</b>	Liquid	<b>Boiling Point</b>	118°C (244.4°F)
<b>Melting / Freezing Point</b>	16°C (60.8°F)	<b>Flash Point</b>	39°C (102.2°F)
<b>Solubility</b>	Fully miscible with water, alcohols	<b>Molecular Formula</b>	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>
<b>Molecular Weight</b>	60.05 g/mol	<b>Vapor Pressure (20°C)</b>	0.5 mmHg
<b>Viscosity (25°C)</b>	1.2 cP	<b>Refractive Index (20°C)</b>	1.373
<b>Density (25°C)</b>	1.05 g/mL		

## APPLICATIONS

1. **Food Processing** — Used as a potent preservative in pickling and canning to inhibit the growth of harmful bacteria and extend shelf life.
2. **Culinary Manufacturing** — Functions as a key ingredient in dressings, marinades, and sauces to provide a sharp, clean flavor profile and necessary acidity.
3. **Commercial Cleaning** — Leverages its acidic properties to effectively sanitize and deodorize food-contact surfaces in industrial kitchens.
4. **Beverage Production** — Utilized by manufacturers to fine-tune pH levels in various specialty beverages to ensure consistent taste and stability.

## STORAGE & HANDLING

Due to its flash point of 39°C, this product is classified as a flammable liquid and must be stored in a cool, well-ventilated area away from heat sources. Proper containment is essential to mitigate the risk of severe skin burns and eye damage associated with its corrosive nature.

- Store in a cool, dry place away from direct sunlight.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Avoid contact with strong bases and oxidizing agents.
- Ensure proper ventilation when handling to minimize inhalation of vapors.
- Wear appropriate personal protective equipment (PPE) such as 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:

- H226: Flammable liquid and vapor [Warning Flammable liquids]
- 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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