

PRODUCT IDENTIFICATION



Product Name: 75% Diluted Acetic Acid Food Grade

CAS Number: 64-19-7

Molecular Formula: $C_2H_4O_2$

Molecular Weight: 60.05 g/mol

Grade: Food Grade

Purity / Concentration: 75%

Synonyms: Vinegar Concentrate, Acetic Acid Solution

PRODUCT OVERVIEW

Alliance Chemical offers high-purity 75% Food Grade Acetic Acid, a versatile solution essential for acidity control and microbial inhibition. With an assay of 75.3% and strict impurity controls, including heavy metals at only 0.1 ppm, this product ensures consistency and safety for your food production needs.

Grade Significance: Food Grade certification guarantees that the product meets stringent purity standards and is manufactured in facilities that minimize contamination risks, ensuring it is safe for human consumption.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (Titration)	%	75	74.5	75.5	Titration
Color (APHA/Hazen)	APHA	3	—	10	Spectrophotometry
Specific Gravity (20°C)	g/mL	1.0377	1.0348	1.0407	Hydrometer @ 25°C
Residue On Evaporation	ppm	1	0	50	Evaporation
Water Karl Fischer	%	0.05	—	0.15	Karl Fischer
Arsenic Antimony As As	ppm	0.5	0	1	ICP-MS
Iron (Fe)	ppm	≤ 1 ppm	—	—	ICP-MS
Lead Pb	ppm	0.2	0	0.5	ICP-MS
Chloride Cl	ppm	≤ 0.75 ppm	—	—	ICP
Sulfate So4	ppm	≤ 0.75 ppm	—	—	ICP
Acid Value	mg KOH/g	0.01	0	0.04	Titration
Acidity	%	0.04	—	0.75	Titration
Aldehydes	%	≤ 0.04 %	—	—	Per specification
Distillation Range	—	6.4	—	0.75	Per specification
Mercury Hg	ppm	0.05	0	0.1	ICP-MS
Sulfite So3	ppm	0.68	—	0.75	ICP

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Odor	Pungent, vinegar-like odor
Boiling Point	118-120°C	Flash Point	11°C (52°F)
Solubility	Miscible in water	Molecular Formula	C ₂ H ₄ O ₂
Molecular Weight	60.05 g/mol	Vapor Pressure (20°C)	15 mmHg
Viscosity (25°C)	1.2 cP	Refractive Index (20°C)	1.371
Density (25°C)	1.05 g/mL		

APPLICATIONS

1. **Food Preservation** — Used as a potent preservative to inhibit microbial growth, extending the shelf life of various perishable goods.
2. **Condiment Manufacturing** — Commonly utilized in dressings, marinades, and sauces to provide a consistent tart flavor profile and enhance overall taste.
3. **Pickling Industry** — Serves as an essential component in the pickling process, balancing acidity levels while ensuring optimal preservation of vegetables.
4. **Food Processing** — Acts as a reliable pH regulator, allowing manufacturers to precisely adjust acidity levels in diverse food formulations.

STORAGE & HANDLING

Proper storage is critical because 75% Acetic Acid is a flammable liquid with a flash point of 11°C, requiring a cool, well-ventilated area away from ignition sources. Additionally, its corrosive nature necessitates storage in compatible containers to prevent material degradation and ensure worker safety from severe skin and eye hazards.

- Store in a cool, dry place away from direct sunlight.
- Use materials compatible with acetic acid, such as HDPE or glass containers.
- Avoid contact with strong oxidizing agents and bases.
- Ensure proper ventilation in storage areas to prevent vapor accumulation.
- Wear appropriate personal protective equipment (PPE) when handling.

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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