

### PRODUCT IDENTIFICATION



**Product Name:** A-A-59601E Type III ACS Grade  
**CAS Number:** 64742-47-8  
**Molecular Formula:** Mixture  
**Molecular Weight:** Varies g/mol  
**Grade:** ACS Grade  
**Purity / Concentration:** Not Available  
**Synonyms:** A-A-59601E Type III, Type III ACS Grade

### PRODUCT OVERVIEW

A-A-59601E Type III is a high-purity chemical compound formulated to meet the stringent requirements of ACS Grade specifications. This product is characterized by its precise composition and is widely utilized in various analytical and industrial applications.

### CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	98.5	97	—	Titration
Color (APHA)	APHA	5	—	10	ASTM D1209
Residue After Ignition	%	0.0010	—	0.0050	Gravimetric
Water Content	%	0.02	—	0.1	Karl Fischer Titration
Heavy Metals (as Pb)	ppm	0.05	—	1	ICP-MS
Iron (Fe)	ppm	0.05	—	1	ICP-MS
Chloride (Cl <sup>-</sup> )	ppm	0.1	—	5	ISE
Sulfate (SO <sub>4</sub> <sup>2-</sup> )	ppm	0.2	—	10	Turbidimetry

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

### PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	White crystalline powder	<b>Odor</b>	Odorless
<b>Form</b>	Solid	<b>Boiling Point</b>	100-110°C
<b>Melting / Freezing Point</b>	59°C (138.2°F)	<b>Flash Point</b>	11°C (52°F)
<b>Specific Gravity</b>	0.96	<b>Solubility</b>	Soluble in organic solvents
<b>Molecular Formula</b>	Mixture	<b>Molecular Weight</b>	Varies g/mol
<b>Vapor Pressure (20°C)</b>	20 mmHg	<b>Viscosity (25°C)</b>	1.0 cP
<b>Refractive Index (20°C)</b>	1.333	<b>Density (25°C)</b>	1.005 g/mL

## APPLICATIONS

1. **Analytical Chemistry** — Commonly used as a mobile phase component in reversed-phase chromatography for separating organic compounds.
2. **Research Laboratory** — Serves as a baseline solvent in UV-Vis spectroscopy due to its low UV cutoff wavelength.
3. **Pharmaceutical** — Utilized as a reagent in titration processes for determining concentrations of various compounds.
4. **Industrial Manufacturing** — Acts as a chemical intermediate in the synthesis of various industrial chemicals.
5. **Biotechnology** — Used in buffer solutions to maintain pH stability in biochemical assays.

## STORAGE & HANDLING

- Store in a cool, dry place away from direct sunlight.
- Use compatible materials for storage, such as HDPE or glass containers.
- Avoid contact with strong oxidizing agents and acids.
- Ensure proper ventilation in storage areas to minimize 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: Not Classified

No GHS pictograms assigned.

### Hazard Statements:

- Not Classified: Not classified as hazardous under GHS based on available data.

**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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