

### PRODUCT IDENTIFICATION



**Product Name:** A-A-59601E Type III Technical Grade

**CAS Number:** 64742-47-8

**Molecular Formula:** Mixture

**Molecular Weight:** Varies g/mol

**Grade:** Technical Grade

**Purity / Concentration:** Not Available

**Synonyms:** A-A-59601E Type 3, A-A-59601E Type III Solution

### PRODUCT OVERVIEW

A-A-59601E Type III Technical Grade is a specialized solvent blend characterized by its pale yellow liquid appearance and consistent distillation range. With a high flash point of 101°C and low non-volatile residue, this product serves as a reliable performance chemical for general industrial and laboratory applications.

**Grade Significance:** Technical Grade signifies that this product is manufactured to meet industrial performance standards, offering a cost-effective solution for general applications where reagent-grade purity is not strictly required.

### CERTIFICATE OF ANALYSIS — TYPICAL VALUES

| PARAMETER               | UNIT     | TYPICAL | MIN   | MAX    | TEST METHOD          |
|-------------------------|----------|---------|-------|--------|----------------------|
| Assay Gc Fid            | %        | 100.0   | 99.5  | 100.5  | GC-FID               |
| Color (APHA)            | APHA     | 30      | 25    | 60     | ASTM D1209           |
| Specific Gravity (20°C) | g/mL     | 0.8128  | 0.76  | 0.8534 | Hydrometer @ 20°C    |
| Viscosity               | cP       | 2.81    | 0     | 5      | Per specification    |
| Non Volatile Residue    | mg/100mL | 3       | 0     | 10     | ASTM D1353           |
| Non-Volatile Residue    | %        | 0.05    | 0     | 10     | Residue on Ignition  |
| Water Karl Fischer      | %        | ND      | 0     | —      | ASTM E203 / ISO 6296 |
| Chloride Cl             | ppm      | 1       | 0     | 100.0  | Ion Chromatography   |
| Aromatics               | %        | 0.3     | —     | 1      | Per specification    |
| Distillation Range      | °C       | 216.5   | 177.0 | 295.0  | Per specification    |
| Flash Point             | °C       | 81      | 60    | —      | Per specification    |

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

### PHYSICAL & CHEMICAL PROPERTIES

|                         |                                             |                                 |              |
|-------------------------|---------------------------------------------|---------------------------------|--------------|
| <b>Appearance</b>       | Pale yellow liquid                          | <b>Form</b>                     | Liquid       |
| <b>Boiling Point</b>    | 218°C (424.4°F)                             | <b>Melting / Freezing Point</b> | 80°C (176°F) |
| <b>Flash Point</b>      | 101 °C (213.8 °F),<br>closed cup (ASTM D56) | <b>Specific Gravity</b>         | 0.96         |
| <b>Solubility</b>       | Organic solvent<br>soluble                  | <b>Molecular Formula</b>        | Mixture      |
| <b>Molecular Weight</b> | Varies g/mol                                |                                 |              |

## APPLICATIONS

1. **Industrial Cleaning** — Utilized as an effective solvent for removing heavy residues and oils from machinery components without leaving significant surface deposits.
2. **Laboratory Research** — Functions as a stable medium for chemical synthesis and standardized testing procedures requiring specific evaporation profiles.
3. **Coatings and Adhesives** — Serves as a carrier solvent in the formulation of specialized coatings, ensuring uniform application and consistent drying times.
4. **Chemical Manufacturing** — Acts as a reliable process chemical or reaction diluent, prized for its low aromatic content and controlled specific gravity.

## STORAGE & HANDLING

Proper storage in a cool, well-ventilated area is essential to maintain the purity and chemical integrity of the solvent. While not classified as hazardous under GHS, keeping the container tightly sealed prevents contamination and ensures the distillation properties remain within specified limits.

- Store in a cool, dry place away from direct sunlight.
- Use compatible materials for storage containers, such as HDPE or glass.
- Avoid contact with strong oxidizing agents and acids.
- 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:

- 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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