

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 high-purity solvent designed for demanding industrial and laboratory applications. This pale yellow liquid features a controlled distillation range and extremely low non-volatile residue, ensuring consistent performance in sensitive processes.

Grade Significance: Technical Grade indicates that this product is manufactured to meet specific industrial performance standards, offering a cost-effective solution for applications where absolute pharmaceutical or food-grade purity is not 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

Appearance	Pale yellow liquid	Form	Liquid
Boiling Point	218°C (424.4°F)	Melting / Freezing Point	80°C (176°F)
Flash Point	49°C (120.2°F)	Specific Gravity	0.96
Solubility	Organic solvent soluble	Molecular Formula	Mixture
Molecular Weight	Varies g/mol		

APPLICATIONS

1. **Industrial Cleaning** — Utilized as a precision cleaning agent for removing oils and contaminants from metal components without leaving significant residue.
2. **Chemical Synthesis** — Serves as a reliable solvent or reaction medium in various chemical manufacturing processes requiring low aromatic content.
3. **Laboratory Research** — Used in analytical testing environments where a consistent, verified distillation range is critical for experimental accuracy.
4. **Coatings and Adhesives** — Acts as a carrier solvent in the formulation of specialty coatings to ensure proper viscosity and drying characteristics.

STORAGE & HANDLING

Proper storage is essential to maintain the chemical integrity and purity of this solvent, specifically protecting it from contamination that could alter its low non-volatile residue profile. While not classified as GHS hazardous, it should be stored in a cool, well-ventilated area away from direct heat to prevent degradation or pressure buildup in containers.

- 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.

Alliance Chemical | 204 South Edmond St, Taylor, Texas 76574 | 512-365-6838 | www.alliancechemical.com

Disclaimer: The information contained herein is believed to be accurate and represents the best information currently available to us. However, Alliance Chemical makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.