Technical Data Sheet

A-A-59601E Type III Technical Grade

Technical

Alliance Code	Revised	Revision
a-a-59601e-type-iii	2026-10-08	1.5

CAS number
64742-47-8

Grade
Technical

Signal word
Danger

Hazards

Irritant / harmful | Health hazard | H304 H336

IDENTITY & COMPOSITION

PRODUCT NAME
A-A-59601E Type III Technical Grade

ALLIANCE CODE
a-a-59601e-type-iii

GRADE
Technical

CONCENTRATION
—

CAS NUMBER
64742-47-8 Adjudicated

FORMULA
Mixture Adjudicated

MOLECULAR WEIGHT
Varies Adjudicated

PRODUCT TYPE
Pure substance

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Total chlorine content	100 ppm, max.	—	—	Interpreted
Aniline point	73 to 89 °C	—	ASTM D611	Interpreted
Aniline point (Type III)	73 to 89 °C	—	ASTM D 611	Interpreted
Initial boiling point	220 °C min.	—	ASTM D86	Interpreted
Color, Saybolt (Type III)	30, min.	—	ASTM D 156	Interpreted

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Copper corrosion	2a, max.	—	ASTM D 130	Interpreted
Doctor test	Negative	—	ASTM D 235	Interpreted
Dry point	295 °C max.	—	ASTM D86	Interpreted
Flash point	93.3 °C (200 °F) min.	—	ASTM D56	Interpreted
Kauri-butanol value	27 to 45	—	ASTM D1133	Interpreted
Non-volatile residue	10 mg/100 ml, max.	—	ASTM F 331	Interpreted
Distillation, 90 % recovered	275 °C max.	—	ASTM D86	Interpreted

Values are reproduced from the current product reference. Source labels do not by themselves establish a supplier guarantee or a test result for your lot. Confirm applicable acceptance limits and request lot-specific documentation.

AVAILABLE GRADES SAME CAS, ALTERNATE GRADES AND CONCENTRATIONS

GRADE	CONCENTRATION	TYPICAL ASSAY	SKU
THIS GRADE Technical	—	—	current
ACS Grade	—	—	a-a-59601e-type-iii-acs-grade

Typical assay for each grade is the average of its recent lots. Confirm a grade meets your specification before substituting it.

PHYSICAL & CHEMICAL PROPERTIES

PROPERTY	VALUE	SOURCE
Appearance	Pale yellow liquid	Published reference
Odor	Hydrocarbon-like	Adjudicated
Specific Gravity	0.81 at 15.6 °C (water = 1)	Adjudicated
Boiling Point	242–276 °C (468–529 °F) distillation range	Adjudicated
Melting Point	-22 °C (-8 °F), freezing point	Adjudicated
Flash Point	101 °C (213.8 °F), closed cup (ASTM D56)	Adjudicated
Vapor Pressure	< 0.1 mmHg at 20 °C	Adjudicated
Solubility (water)	Negligible in water	Adjudicated
Viscosity	2.5–3.8 mm^2/s at 20–40 °C	Adjudicated

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER

Not regulated **Adjudicated**

HAZARD CLASS

Not regulated **Adjudicated**

PACKING GROUP

Not regulated **Adjudicated**

PROPER SHIPPING NAME

Not regulated **Adjudicated**

GHS / OSHA HCS 2024

SIGNAL WORD

Danger **Adjudicated**

H-CODES (HAZARD STATEMENTS)

`H304, H336` **Adjudicated**

P-CODES (PRECAUTIONARY STATEMENTS)

`P260, P264, P271, P280, P301+P310, P304+P340, P312, P331, P403+P233, P405, P501`

Adjudicated

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

500 ppm TWA **OSHA 29 CFR 1910.1000**

ACGIH TLV

— **no canonical**

NIOSH REL

350 mg/m^3 TWA / 1800 mg/m^3 Ceiling (15 min)

NIOSH IDLH

20000 mg/m^3 **NIOSH Pocket Guide**

NIOSH Pocket Guide

Transport descriptions reflect 49 CFR 172.101 lookup at time of publication. Sourced data: NIOSH Pocket Guide for REL/IDLH, OSHA Z-Tables for PEL. Always verify against the latest regulatory text before shipment-critical decisions.

APPLICATIONS

Hydrocarbon solvent used in the dry cleaning and coatings industries and, in military service, for degreasing and cleaning painted or unpainted metal parts (sourced from revision D of the A-A-59601 CID).

everyspec.com

Type III (low odor, very high flash point) is intended for cleaning where confined atmospheric conditions require a cleaner conforming to federal directives for reducing hazardous materials.

everyspec.com

Applications are drawn from published manufacturer and supplier documentation; each is sourced. Suitability for a specific use is the buyer's to confirm.

STORAGE & HANDLING

RECOMMENDED STORAGE

Keep closed in a cool, well-ventilated place away from oxidizers and heat. Store locked up.

Adjudicated

HANDLING PRECAUTIONS

Use standard chemical PPE — splash goggles, gloves, lab coat. Refer to SDS for hazard-specific PPE requirements.

Class-level guidance — not product-specific; the SDS controls.

INCOMPATIBILITIES

Strong oxidizing agents. Adjudicated

SHELF LIFE

Consult Technical Services for product-specific shelf life

For full hazard, PPE, and emergency response guidance, refer to the Safety Data Sheet (SDS) for this product. The SDS controls in all cases where guidance differs.

PACKAGING & LOGISTICS

SHIPPING DESCRIPTION (US DOT)

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Not regulated for transport.
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Confirm against shipping documents and carrier requirements before tender.

NMFC CLASS

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REVISION HISTORY

Last reviewed 2026-10-08 by Andre Taki, Chief Commercial Officer, DOT Hazmat–certified (49 CFR 172.704).

VERSION	DATE	CHANGE	TRIGGER
1.5	2026-10-08	Canonical data updated: 22 fields changed via the provenance/adjudication pipeline. • ghsClassification · canonical change (coa.data_provenance / adjudication) • hazard_h_codes · canonical change (coa.data_provenance / adjudication) • hazard_p_codes · canonical change (coa.data_provenance / adjudication) • synonyms · canonical change (coa.data_provenance / adjudication) • recommended_use · canonical change (coa.data_provenance / adjudication) • restrictions_on_use · canonical change (coa.data_provenance / adjudication) • odor · canonical change (coa.data_provenance / adjudication) • boilingPoint · canonical change (coa.data_provenance / adjudication) • meltingPoint · canonical change (coa.data_provenance / adjudication) • vaporPressure · canonical change (coa.data_provenance / adjudication) • specificGravity · canonical change (coa.data_provenance / adjudication) • solubility · canonical change (coa.data_provenance / adjudication) • viscosity · canonical change (coa.data_provenance / adjudication) • autoIgnitionTemperature · canonical change (coa.data_provenance / adjudication) • explosiveLimits · canonical change (coa.data_provenance / adjudication) • incompatible_materials · canonical change (coa.data_provenance / adjudication) • conditions_to_avoid · canonical change (coa.data_provenance / adjudication) • hazardous_decomposition_products · canonical change (coa.data_provenance / adjudication) • storage_precautions · canonical change (coa.data_provenance / adjudication) • rcra_waste_codes · canonical change (coa.data_provenance / adjudication) • cercla_rq · canonical change (coa.data_provenance / adjudication) • dot_transport_note · canonical change (coa.data_provenance / adjudication)	canonical_change
1.4	2026-10-05	Canonical data updated: 3 fields changed via the provenance/adjudication pipeline. • oel_niosh_rel · canonical change (coa.data_provenance / adjudication) • oel_idlh · canonical change (coa.data_provenance / adjudication) • oel_osha_pel · canonical change (coa.data_provenance / adjudication)	canonical_change
1.3	2026-09-10	Canonical data updated: 1 field changed via the provenance/adjudication pipeline. • flashPoint · canonical change (coa.data_provenance / adjudication)	canonical_change

VERSION	DATE	CHANGE	TRIGGER
1.2	2026-07-22	Canonical data updated: 4 fields changed via the provenance/adjudication pipeline. • unNumber · canonical change (coa.data_provenance / adjudication) • hazardClass · canonical change (coa.data_provenance / adjudication) • packingGroup · canonical change (coa.data_provenance / adjudication) • dotProperShippingName · canonical change (coa.data_provenance / adjudication)	canonical_change
1.1	2026-07-17	Canonical data re-verified: 13 fields updated against independent vendor SDSs, CLP Annex VI, 49 CFR, and OSHA HazCom 2024 (GHS classification, hazard/precautionary codes, signal word, physical properties as applicable). • bulkThresholdGallons · canonical adjudication / reground (coa.data_provenance) • countryOfOrigin · canonical adjudication / reground (coa.data_provenance) • dotProperShippingName · canonical adjudication / reground (coa.data_provenance) • dotSubsidiaryHazardClass · canonical adjudication / reground (coa.data_provenance) • ghsClassification · canonical adjudication / reground (coa.data_provenance) • hazardClass · canonical adjudication / reground (coa.data_provenance) • hazard_h_codes · canonical adjudication / reground (coa.data_provenance) • hsCode · canonical adjudication / reground (coa.data_provenance) • packingGroup · canonical adjudication / reground (coa.data_provenance) • physicalProperties · canonical adjudication / reground (coa.data_provenance) • regulationRule · canonical adjudication / reground (coa.data_provenance) • signalWord · canonical adjudication / reground (coa.data_provenance) • unNumber · canonical adjudication / reground (coa.data_provenance)	canonical_change
1.0	2026-05-20	Initial URL-first TDS published from canonical chemistry registry.	initial

This Technical Data Sheet is provided for technical reference. The Safety Data Sheet (SDS) controls in all cases where guidance differs. Values reflect Alliance Chemical canonical data at time of generation; subsequent revisions are recorded in the Revision History above.