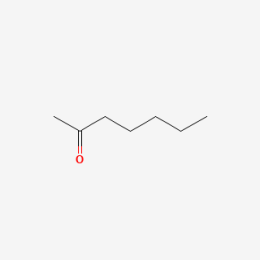
Technical Data Sheet

Methyl n-Amyl Ketone (MNAK) ACS Grade

ACS Grade

Alliance Code	Revised	Revision
methyl-n-amyl-ketone-mnak-acs-grade	2026-10-08	1.6

CAS number 110-43-0	UN number UN1110	Hazard class · packing group 3 · PG III
 Structure · PubChem	Grade ACS Grade	Signal word **Warning**
Hazards Flammable · Irritant / harmful · H226 H302 H332 H336		
Proper shipping name n-Amyl methyl ketone		

IDENTITY & COMPOSITION

PRODUCT NAME
Methyl n-Amyl Ketone (MNAK) ACS Grade

ALLIANCE CODE
methyl-n-amyl-ketone-mnak-acs-grade

GRADE
ACS Grade

CONCENTRATION
—

CAS NUMBER
110-43-0 PubChem

MOLECULAR WEIGHT
114.19 PubChem

PRODUCT TYPE
Pure substance

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Assay (GC)	Min. 99.0 %	—	GC	Interpreted

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Ethanol (GC)	Max. 0.20 %	—	GC	Interpreted
Identity (IR)	complying	—	IR	Interpreted
Other ketones	Max. 0.50 %	—	—	Interpreted
Free acid (as CH3COOH)	Max. 0.01 %	—	—	Interpreted
Water (Karl Fischer)	Max. 0.05 %	—	Karl Fischer	Interpreted
Colour (APHA)	Max. 10	—	ASTM D1209 (Pt-Co)	Interpreted
Residue on Evaporation	Max. 0.005 %	—	ASTM D1353 / gravimetric	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 ACS Grade	—	—	current
Technical	—	—	methyl-n-amyl-ketone-mnak

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	Clear, colorless liquid	Adjudicated
Form	Liquid	Published reference
Odor	Sweet, fruity ketone odor	Adjudicated
Specific Gravity	0.81–0.82 at 20–25 °C (water = 1)	Adjudicated
Density	0.813-0.816 g/ml at 20 °C	Interpreted
Boiling Point	149–152 °C (300–306 °F)	Adjudicated
Melting Point	-35 °C (-31 °F)	Adjudicated
Flash Point	39–41 °C (102–106 °F), closed cup	Adjudicated
Vapor Pressure	2.1–2.8 mmHg at 20–25 °C	Adjudicated
Vapor Density	3.9 (air = 1)	Adjudicated
Solubility (water)	Slightly soluble in water (about 4.3 g/L at 20 °C); miscible with most organic solvents	Adjudicated
Refractive Index (nD 20)	1.405-1.409	Interpreted

Polar solvent — purity vs. intended end-use (electronics, pharma, general industrial) is the dominant grade consideration. See application guidance for grade selection.

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER

UN1110 Adjudicated

HAZARD CLASS

3 Adjudicated

PACKING GROUP

III Adjudicated

PROPER SHIPPING NAME

n-Amyl methyl ketone Adjudicated

GHS / OSHA HCS 2024

SIGNAL WORD

Warning Adjudicated

H-CODES (HAZARD STATEMENTS)

H226, H302, H332, H336 Adjudicated

P-CODES (PRECAUTIONARY STATEMENTS)

P210, P233, P240, P241, P242, P243, P261, P264, P270, P271, P280, P301+P312, P303+P361+P353, P304+P340, P312, P313, P330, P370+P378, P403+P233, P403+P235, P405, P501

Adjudicated

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

100 ppm TWA OSHA 29 CFR 1910.1000

ACGIH TLV

50 ppm TWA Adjudicated

NIOSH REL

100 ppm (465 mg/m^3) TWA Adjudicated

NIOSH IDLH

800 ppm Adjudicated

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.

HEALTH & FIRE HAZARD

ACUTE TOXICOLOGY

LD_{50} ORAL

1,600–1,670 mg/kg (rat), the basis for H302

Adjudicated

LD_{50} DERMAL

> 2,000 mg/kg (rat); 12.6 mL/kg (rabbit)

Adjudicated

LC_{50} INHALATION

> 16.7 mg/L (rat, 4 h); 2,000–4,000 ppm (rat, 6 h)

Adjudicated

Acute toxicology values from SDS Section 11 or NIOSH RTECS.

APPLICATIONS

Solvent for cellulosic lacquers, acrylic lacquers, and high-solids coatings productcatalog.eastman.com

Polymerization solvent for high solids acrylic resins productcatalog.eastman.com

Used in auto OEM, auto-refinish and general industrial coatings, as a herbicide intermediate, and as a process solvent.

productcatalog.eastman.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 tightly closed in a cool, well-ventilated flammables area away from ignition sources and oxidizers. Store locked up. Ground and bond containers.

Adjudicated

INCOMPATIBILITIES

Strong oxidizing agents; strong acids. Adjudicated

HANDLING PRECAUTIONS

Use chemical-resistant gloves and splash goggles. Bond and ground during transfer to prevent static accumulation. Eliminate ignition sources within vapor envelope.

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

SHELF LIFE

60 months srlchem.com

Stored at 25 to 40 C (room temperature)

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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UN1110, n-Amyl methyl ketone, 3, PG III
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Packaging-dependent regulation: Non-bulk packaging (≤ 119 gal, e.g. drums, pails, cans) ships as NON-REGULATED under the combustible-liquid reclassification (49 CFR 173.150(f)). Bulk packaging (totes/IBC > 119 gal) ships fully regulated under the DOT profile shown above. The combustible-liquid reclassification does not apply to transportation by vessel or aircraft, except where other means of transportation is impracticable (49 CFR 173.120(b)(2)).

Sourced from 49 CFR 172.101. Confirm against shipping documents and carrier requirements before tender.

NMFC CLASS	PLACARD (BULK ONLY)	PACKING GROUP
77.5	Flammable Liquid	PG III

REVISION HISTORY

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

VERSION	DATE	CHANGE	TRIGGER
1.6	2026-10-08	Canonical data updated: 25 fields changed via the provenance/adjudication pipeline. • synonyms · canonical change (coa.data_provenance / adjudication) • restrictions_on_use · canonical change (coa.data_provenance / adjudication) • odor · canonical change (coa.data_provenance / adjudication) • odorThreshold · canonical change (coa.data_provenance / adjudication) • flashPoint · 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) • vaporDensity · canonical change (coa.data_provenance / adjudication) • specificGravity · canonical change (coa.data_provenance / adjudication) • solubility · canonical change (coa.data_provenance / adjudication) • evaporationRate · canonical change (coa.data_provenance / adjudication) • autoIgnitionTemperature · canonical change (coa.data_provenance / adjudication) • explosiveLimits · canonical change (coa.data_provenance / adjudication) • oel_acgih_tlv · canonical change (coa.data_provenance / adjudication) • oel_niosh_rel · canonical change (coa.data_provenance / adjudication) • oel_idlh · 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) • recommended_use · canonical change (coa.data_provenance / adjudication)	canonical_change
1.5	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
1.4	2026-09-30	Canonical data updated: 4 fields changed via the provenance/adjudication pipeline. • boilingPoint · canonical change (coa.data_provenance / adjudication) • meltingPoint · canonical change (coa.data_provenance / adjudication) • flashPoint · canonical change (coa.data_provenance / adjudication) • appearance · canonical change (coa.data_provenance / adjudication)	canonical_change

VERSION	DATE	CHANGE	TRIGGER
1.3	2026-07-22	Canonical data updated: 2 fields changed via the provenance/adjudication pipeline. • dotSubsidiaryHazardClass · canonical change (coa.data_provenance / adjudication) • dotProperShippingName · canonical change (coa.data_provenance / adjudication)	canonical_change
1.2	2026-07-17	Canonical data updated: 3 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)	canonical_change
1.1	2026-07-17	Canonical data re-verified: 7 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) • ghsClassification · canonical adjudication / reground (coa.data_provenance) • hazard_h_codes · canonical adjudication / reground (coa.data_provenance) • hazard_p_codes · canonical adjudication / reground (coa.data_provenance) • hsCode · canonical adjudication / reground (coa.data_provenance) • regulationRule · 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.