

TECHNICAL DATA SHEET

Methyl n-Propyl Ketone (MPK) ACS

ACS Grade · 94%

CAS NUMBER	ALLIANCE CODE	GENERATED
107-87-9	methyl-n-propyl-ketone-mpk-acs	2026-09-01
REVISION	REVIEWED	
1.3	2026-07-17 · Andre Taki	

IDENTITY & COMPOSITION

PRODUCT NAME	ALLIANCE CODE
Methyl n-Propyl Ketone (MPK) ACS	methyl-n-propyl-ketone-mpk-acs
GRADE	CONCENTRATION
ACS Grade	94%
CAS NUMBER	FORMULA
107-87-9 PubChem	C5H10O PubChem
MOLECULAR WEIGHT	PRODUCT TYPE
86.13 PubChem	pure_substance

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Assay (Methyl Propyl Ketone)	99.50 MIN %	99.9 %	Gas chromatography (Eastman TCMD-A-AN-G-GC-170)	Supplier specification
Acid as Acetic	0.0200 MAX %	0.0015 %	Titration (Eastman TCMD-A-AN-G-VA-12)	Supplier specification

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Methyl Isobutyl Ketone	0.10 MAX %	0.01 %	Gas chromatography (Eastman TCMD-A-AN-G-GC-170)	Supplier specification
Other Ketones	0.10 MAX %	0.03 %	Gas chromatography (Eastman TCMD-A-AN-G-GC-170)	Supplier specification
Water	0.1000 MAX %	0.015 %	Karl Fischer (Eastman TCMD-A-AN-G-VA-336)	Supplier specification
Residue After Evaporation	0.001 wt % max.	0.0002 wt %	ASTM D1353	Interpreted

Specification values are guaranteed limits. Typical values are representative of production lots and are not guaranteed. Lot-specific certificates of analysis ship with every order.

AVAILABLE GRADES SAME CAS, ALTERNATE GRADES AND CONCENTRATIONS

GRADE	CONCENTRATION	TYPICAL ASSAY	SKU
THIS GRADE ACS Grade	94%	—	current
Reagent	—	—	methyl-n-propyl-ketone-mpk

Typical assay shown is the rolling-window mean from the sibling product's most recent lots. Grade selection drives downstream end-use — verify the sibling grade matches your specification before substitution.

PHYSICAL & CHEMICAL PROPERTIES

PROPERTY	VALUE	SOURCE
Appearance	colorless transparent liquid	Supplier specification
Form	Liquid	Published reference
Color	15 MAX pcs	Supplier specification
Odor	Characteristic acetone-like odor	Published reference
Specific Gravity (20 °C)	0.806 – 0.809	Supplier specification
Density	0.809 at 68 °F (USCG, 1999) – Less dense than water; will float	Published reference
Boiling Point	101.0 – 104.0 °C (incl. 102.3 °C)	Interpreted
Melting Point	–108 °F (NTP, 1992)	Published reference
Flash Point	45 °F (NTP, 1992)	Published reference
Vapor Pressure	12 mmHg at 68 °F ; 16 mmHg at 77 °F; 21 mmHg at 86 °F (NTP, 1992)	Published reference
Solubility (water)	10 to 50 mg/mL at 72 °F (NTP, 1992)	Published reference
Refractive Index (nD 20)	1.3890 – 1.3910 @ 20°C	Supplier specification

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER

UN1249 [49 CFR 172.101](#)

PACKING GROUP

II [Adjudicated](#)

HAZARD CLASS

3 [Adjudicated](#)

PROPER SHIPPING NAME

Methyl propyl ketone [Adjudicated](#)

GHS / OSHA HAZCOM 2012

SIGNAL WORD

Danger [Adjudicated](#)

H-CODES (HAZARD STATEMENTS)

H225, H302, H319, H335 [Adjudicated](#)

P-CODES (PRECAUTIONARY STATEMENTS)

P210, P233, P240, P241, P242, P243, P261,
P264, P270, P271, P280, P301+P312,
P303+P361+P353, P304+P340,
P305+P351+P338, P314, P330, P337+P313,
P370+P378, P403+P233, P403+P235, P405,
P501

[Adjudicated](#)

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

— [no canonical](#)

ACGIH TLV

— [no canonical](#)

NIOSH REL

— [no canonical](#)

NIOSH IDLH

— [no canonical](#)

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

APPLICATIONS

Active solvent for most synthetic resins, including acrylics, polyesters, cellulose, epoxies, vinyls and alkyds

productcatalog.eastman.com

Letdown solvent for high-solids resins used to formulate low-VOC coatings

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

Cool, dry, well-ventilated area in original sealed containers. Refer to product SDS for material-specific guidance.

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

INCOMPATIBILITIES

Consult the SDS for material-specific incompatibilities.

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

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.

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.

SHELF LIFE

Consult Technical Services for product-specific shelf life

PACKAGING & LOGISTICS

SHIPPING DESCRIPTION (US DOT)

UN1249, Methyl propyl ketone, 3, PG II

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

NMFC CLASS 70	PLACARD Flammable Liquid	PACKING GROUP PG II
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REVISION HISTORY

Last reviewed 2026-07-17 by Andre Taki, DOT Hazmat Specialist.

VERSION	DATE	CHANGE	TRIGGER
1.3	2026-08-05	Canonical data updated: 1 field changed via the provenance/adjudication pipeline. unNumber · canonical change (coa.data_provenance / adjudication)	canonical_change

VERSION	DATE	CHANGE	TRIGGER
1.2	2026-07-22	Canonical data updated: 3 fields changed via the provenance/adjudication pipeline. • dotSubsidiaryHazardClass · canonical change (coa.data_provenance / adjudication) • dotProperShippingName · canonical change (coa.data_provenance / adjudication) • ghsClassification · canonical change (coa.data_provenance / adjudication)	canonical_change
1.1	2026-07-17	Canonical data re-verified: 5 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). • 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)	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.