

TECHNICAL DATA SHEET

Methyl Ethyl Ketone (MEK) Technical Grade

Technical

CAS NUMBER	ALLIANCE CODE	GENERATED
78-93-3	methyl-ethyl-ketone-mek	2026-08-31
REVISION	REVIEWED	
1.3	2026-06-18 · Andre Taki	

IDENTITY & COMPOSITION

PRODUCT NAME	ALLIANCE CODE
Methyl Ethyl Ketone (MEK) Technical Grade	methyl-ethyl-ketone-mek
GRADE	CONCENTRATION
Technical	—
CAS NUMBER	FORMULA
78-93-3 PubChem	C4H8O PubChem
MOLECULAR WEIGHT	PRODUCT TYPE
72.11 PubChem	pure_substance

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Purity	99.5 % m/m min.	99.9 % m/m	ASTM D2804	Supplier specification
Acidity (as acetic acid)	0.003 wt% max	0.0005 wt%	ASTM D1613	Supplier specification
Non-volatile residue	2 mg/100ml max	0.3 mg/100ml	ASTM D1353	Supplier specification

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Total Alcohols	0.5 %m/m max.	0.02 %m/m	ASTM D2804	Supplier specification
Water	0.05 % m/m max.	0.02 % m/m	ASTM D1364	Supplier specification
alcohol impurities	0.05 mass % max	0.02 mass %	—	Supplier specification
ethyl acetate	0.15 Mass % max	0.02 Mass %	—	Supplier specification
acetone content	0.1 mass % max	0.02 mass %	—	Supplier specification

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 Technical	—	—	current
ACS Grade	—	—	methyl-ethyl-ketone-mek-acs-grade

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	Clear and Bright	Supplier specification
Form	Liquid	Published reference
Color	10 Pt-Co max.	Supplier specification
Odor	Characteristic, non-residual	Interpreted
Specific Gravity (20 °C)	0.805 - 0.807	Supplier specification
Density	0.806 at 68 °F (USCG, 1999) - Less dense than water; will float	Published reference
Boiling Point	79.0 °C min	Supplier specification
Melting Point	-123.3 °F (NTP, 1992)	Published reference
Flash Point	26 °F (NTP, 1992)	Published reference
Vapor Pressure	77.5 mmHg at 68 °F ; 100 mmHg at 77.0 °F (NTP, 1992)	Published reference
Solubility (water)	greater than or equal to 100 mg/mL at 66 °F (NTP, 1992)	Published reference
Refractive Index (nD 20)	1.3790	Vendor COA

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER

UN1193 **49 CFR 172.101**

PACKING GROUP

II **Adjudicated**

HAZARD CLASS

3 **Adjudicated**

PROPER SHIPPING NAME

Ethyl methyl ketone or methyl ethyl ketone

Adjudicated

GHS / OSHA HAZCOM 2012

SIGNAL WORD

Danger **Adjudicated**

H-CODES (HAZARD STATEMENTS)

H225, H319, H336, EUH066

ECHA CLP Annex VI

P-CODES (PRECAUTIONARY STATEMENTS)

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

ECHA CLP Annex VI

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

200 ppm TWA **OSHA 29 CFR 1910.1000**

ACGIH TLV

— **no canonical**

NIOSH REL

200 ppm TWA / 300 ppm STEL

NIOSH IDLH

3000 ppm **NIOSH Pocket Guide**

NIOSH Pocket Guide

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.

CATALOG EQUIVALENTS CROSS-REFERENCE VS MAJOR CHEMICAL SUPPLIERS

SIGMA-ALDRICH

SKU	GRADE	CONC.	MATCH	NOTES
360473	ACS Reagent	99%	Exact	ACS Reagent ≥99%

Cross-references are informational. Confirm against the manufacturer's current specification before substitution. Competitor trademarks are property of their respective owners.

APPLICATIONS

Solvent for natural and synthetic resins, giving solutions with low viscosity and high solids content

wurthmachinery.com

Used widely as a solvent labdepotinc.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.

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

12 months wurthmachinery.com

Provided proper storage and handling precautions are taken

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)

UN1193, Ethyl methyl ketone or methyl ethyl 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

REVISION HISTORY

Last reviewed 2026-06-18 by Andre Taki, DOT Hazmat Specialist.

VERSION	DATE	CHANGE	TRIGGER
1.3	2026-08-05	Canonical data updated: 4 fields changed via the provenance/adjudication pipeline. - hazardClass · canonical change (coa.data_provenance / adjudication) - packingGroup · canonical change (coa.data_provenance / adjudication) - signalWord · canonical change (coa.data_provenance / adjudication) - unNumber · canonical change (coa.data_provenance / adjudication)	canonical_change
1.2	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
1.1	2026-06-18	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). - boilingPoint · canonical adjudication / reground (coa.data_provenance) - color · canonical adjudication / reground (coa.data_provenance) - countryOfOrigin · canonical adjudication / reground (coa.data_provenance) - ghsClassification · canonical adjudication / reground (coa.data_provenance) - hsCode · canonical adjudication / reground (coa.data_provenance) - refractiveIndex · canonical adjudication / reground (coa.data_provenance) - specificGravity · 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.