

TECHNICAL DATA SHEET

VM&P Naphtha Technical Grade

Technical

CAS NUMBER

64742-89-8

ALLIANCE CODE

vm-p-naphtha

GENERATED

2026-08-31

REVISION

1.4

REVIEWED

2026-07-17 · Andre Taki

IDENTITY & COMPOSITION

PRODUCT NAME

VM&P Naphtha Technical Grade

ALLIANCE CODE

vm-p-naphtha

GRADE

Technical

CONCENTRATION

—

CAS NUMBER

64742-89-8 Adjudicated

FORMULA

C5-C11 Hydrocarbons Alliance SDS

MOLECULAR WEIGHT

120 g/mol Alliance SDS

PRODUCT TYPE

pure_substance

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Benzene content	20.0 max ppm	2.0 ppm	GC (method not printed on source)	Supplier specification
Aniline point	71.1 °C max	63 °C	ASTM D611	Supplier specification
API gravity @ 15.6 °C	52.2 – 63.1 API	57.65	ASTM D4052	Supplier specification

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Aromatics	1.0 % v/v max	0.2 % v/v	ASTM D3257	Supplier specification
Copper corrosion (3 hr @ 100 °C)	1 max	1a	ASTM D130	Supplier specification
Flash TCC	Min 50 °F	59 °F	—	Supplier specification
Water	Max 0.05 % (500 ppm)	0.005 % (50 ppm)	—	Supplier specification
Kauri-butanol value	30 – 37	33.5	ASTM D1133	Interpreted
Doctor test	Negative (sweet)	Passes test	ASTM D4952	Interpreted
Sulfur, total	20 mg/kg max	0.4 mg/kg	ASTM D5453 (UV fluorescence)	Interpreted
Nonvolatile matter (residue after evaporation)	5 mg/100 mL max	0.5 mg/100 mL	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.

PHYSICAL & CHEMICAL PROPERTIES

PROPERTY	VALUE	SOURCE
Appearance	Clear, colorless liquid	Published reference
Form	Liquid	Published reference
Color	28 min	Supplier specification
Specific Gravity (20 °C)	0.727 – 0.770	Interpreted
Boiling Point	118.3 °C min	Supplier specification
Melting Point	'-60°C	Published reference
Flash Point	10 °C min	Supplier specification
Solubility (water)	Insoluble in water, soluble in organic solvents	Published reference
Refractive Index (nD 20)	1.4081	Vendor COA

MATERIALS OF CONSTRUCTION

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
Buna-N (NBR) Elastomer	Good	80	Good for non-aromatic hydrocarbons; poor for aromatics.	Parker O-ring Chemical Compatibility
EPDM Elastomer	Not recommended	—	Swells in hydrocarbons; never use.	Parker O-ring Chemical Compatibility
Viton (FKM) Elastomer	Excellent	100	Standard for hydrocarbon service.	Parker O-ring Chemical Compatibility
PTFE Fluoropolymer	Excellent	200	Universal.	Cole-Parmer Chemical Compatibility

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
316L Stainless Steel Metal	Excellent	100	Inert.	Cole-Parmer Chemical Compatibility
Carbon Steel Metal	Good	80	Acceptable for dry hydrocarbons.	Cole-Parmer Chemical Compatibility
HDPE Thermoplastic	Not recommended	—	Aromatic solvents swell and dissolve HDPE.	Cole-Parmer Chemical Compatibility

Ratings reflect the service envelope (concentration × temperature) shown. Always confirm against your specific duty cycle and contact-time before equipment selection. The most cautious rating across overlapping references is shown.

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER

UN1268 [49 CFR 172.101](#)

PACKING GROUP

II [Adjudicated](#)

HAZARD CLASS

3 [Adjudicated](#)

PROPER SHIPPING NAME

Petroleum distillates, n.o.s. (VM&P naphtha)

[Adjudicated](#)

GHS / OSHA HAZCOM 2012

SIGNAL WORD

Danger [Adjudicated](#)

H-CODES (HAZARD STATEMENTS)

H225, H304, H315, H336, H340, H350, H361, H373

[Adjudicated](#)

P-CODES (PRECAUTIONARY STATEMENTS)

P201, P202, P210, P233, P280, P301+P310, P308+P313, P331, P405

[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

Used as a solvent in making adhesives, varnishes, lacquers, coatings, rubber resins, textiles and printing inks, and for diluting paints.

[corecheminc.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, well-ventilated flammable-liquid storage. Tightly sealed containers. Segregate from oxidizers. Bond and ground bulk storage; consider inert gas blanketing for volatile solvents. Class-level guidance — not product-specific; the SDS controls.

INCOMPATIBILITIES

Strong oxidizers, halogens, nitric acid. Some grades react with rubber and certain plastics — verify gasket and hose compatibility. 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

Eliminate ignition sources. Use chemical-resistant nitrile or PVA gloves. Bond and ground all transfer equipment. Vapors heavier than air — control ventilation accordingly. Class-level guidance — not product-specific; the SDS controls.

SHELF LIFE

12 months [conservationsupportsystems.com](https://www.conservationsupportsystems.com)
Provided proper storage and handling precautions are taken; stated by Shell for VM&P Naphtha HT (hydrotreated), with detailed storage and handling advice referred to the product MSDS.

PACKAGING & LOGISTICS

SHIPPING DESCRIPTION (US DOT)

UN1268, Petroleum distillates, n.o.s. (VM&P naphtha), 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 2026-07-17 by Andre Taki, DOT Hazmat Specialist.

VERSION	DATE	CHANGE	TRIGGER
1.4	2026-08-05	Canonical data updated: 2 fields changed via the provenance/adjudication pipeline. - hazardClass · canonical change (coa.data_provenance / adjudication) - unNumber · canonical change (coa.data_provenance / adjudication)	canonical_change

VERSION	DATE	CHANGE	TRIGGER
1.3	2026-07-22	Canonical data updated: 1 field changed via the provenance/adjudication pipeline. dotSubsidiaryHazardClass · canonical change (coa.data_provenance / adjudication)	canonical_change
1.1	2026-07-17	Canonical data re-verified: 8 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). - casNumber · 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) - refractiveIndex · canonical adjudication / reground (coa.data_provenance) - specificGravity · canonical adjudication / reground (coa.data_provenance)	canonical_change
1.2	2026-07-17	Canonical data updated: 4 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) - signalWord · canonical change (coa.data_provenance / adjudication)	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.