

TECHNICAL DATA SHEET

Glycerin USP Grade

USP Grade

CAS NUMBER
56-81-5

ALLIANCE CODE
glycerin-usp-grade

GENERATED
2026-07-17

1. IDENTITY & COMPOSITION

PRODUCT NAME
Glycerin USP Grade

ALLIANCE CODE
glycerin-usp-grade

GRADE
USP Grade

CONCENTRATION
—

CAS NUMBER
56-81-5 [PubChem](#)

FORMULA
C3H8O3 [PubChem](#)

MOLECULAR WEIGHT
92.09 [PubChem](#)

PRODUCT TYPE
pure_substance

AVAILABLE GRADES SAME CAS, ALTERNATE GRADES AND CONCENTRATIONS

GRADE	CONCENTRATION	TYPICAL ASSAY	SKU
THIS GRADE USP Grade	—	—	current
—	25%	—	glycerin-25-food-grade
—	—	—	glycerin-50-food-grade
—	—	—	glycerin-75-food-grade
Technical Grade	—	—	glycerin-technical-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

APPEARANCE

Glycerine appears as a colorless to brown colored liquid. Combustible but may require some effort to ignite. [Product record](#)

ODOR

MILD ODOR [Product record](#)

DENSITY

1.261 at 68 °F (USCG, 1999) – Denser than water; will sink [Product record](#)

MELTING POINT

64 °F (NTP, 1992) [Product record](#)

VAPOR PRESSURE

0.0025 mmHg at 122 °F ; 40 mmHg at 388 °F (NTP, 1992) [Product record](#)

FORM

Liquid [Product record](#)

PH

Neutral to litmus [Product record](#)

BOILING POINT

554 °F at 760 mmHg (decomposes) (NTP, 1992) [Product record](#)

FLASH POINT

320 °F (NTP, 1992) [Product record](#)

SOLUBILITY (WATER)

greater than or equal to 100 mg/mL at 64 °F (NTP, 1992) [Product record](#)

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER

Not regulated **Adjudicated**

PACKING GROUP

Not regulated **Adjudicated**

HAZARD CLASS

Not regulated **Adjudicated**

PROPER SHIPPING NAME

Not regulated **Adjudicated**

GHS / OSHA HAZCOM 2012

SIGNAL WORD

Not regulated **Adjudicated**

H-CODES (HAZARD STATEMENTS)

Not applicable **ECHA CLP Annex VI**

P-CODES (PRECAUTIONARY STATEMENTS)

Not applicable **ECHA CLP Annex VI**

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

15 mg/m³ TWA total / 5 mg/m³ TWA respirable

OSHA 29 CFR 1910.1000

ACGIH TLV

— **unknown**

NIOSH REL

5 mg/m³ TWA (mist) **NIOSH Pocket Guide**

NIOSH IDLH

— **unknown**

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.

Supplier Qualification Packet

One zipped download containing the TDS, SDS, latest lot COA (when available), and a fresh Letter of Continuing Guaranty for Glycerin USP Grade. Every file included is SHA-256 hashed and listed in a manifest your QA team can audit.

APPLICATION GUIDANCE

Glycerin USP Grade (USP Grade) application guidance is available on request. Contact Alliance Chemical Technical Services for grade-specific use recommendations.

STORAGE & HANDLING

RECOMMENDED STORAGE

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

INCOMPATIBILITIES

Consult the SDS for material-specific incompatibilities.

HANDLING PRECAUTIONS

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

SHELF LIFE

24 months from date of manufacture in sealed, original packaging

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.

REVISION HISTORY

Last reviewed 2026-05-20 by Hossein Taki, Vice President (Vice President, Alliance Chemical · CAGE Code 1LT50 · DOT Hazmat Registrant #2188383).

VERSION	DATE	CHANGE	TRIGGER
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.

ALLIANCE CHEMICAL

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