TECHNICAL DATA SHEET

Polyethylene Glycol 200 (PEG 200) - Technical Grade

CAS NUMBER	ALLIANCE CODE	GENERATED
25322-68-3	polyethylene-glycol-200-peg-200-technical-grade	2026-07-17

1. IDENTITY & COMPOSITION

PRODUCT NAME
Polyethylene Glycol 200 (PEG 200) - Technical Grade

ALLIANCE CODE
polyethylene-glycol-200-peg-200-technical-grade

GRADE
—

CONCENTRATION
—

CAS NUMBER
25322-68-3 Adjudicated

FORMULA
H(OCH2CH2)nOH Adjudicated

MOLECULAR WEIGHT
200 Adjudicated

PRODUCT TYPE
—

AVAILABLE GRADES SAME CAS, ALTERNATE GRADES AND CONCENTRATIONS

GRADE	CONCENTRATION	TYPICAL ASSAY	SKU
THIS GRADE —	—	—	current
—	—	—	polyethylene-glycol-200-peg

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

One or more physical-property values are temporarily suppressed pending verification against vendor COA data. For complete properties refer to the Safety Data Sheet (SDS) or contact sales@alliancechemical.com.

APPEARANCE
Clear, colorless viscous liquid Product record

FORM
Liquid Product record

ODOR
Mild/odorless Product record

SPECIFIC GRAVITY (20 °C)
~1.12 Product record

DENSITY
~1.12–1.125 g/cm³ (20°C) Product record

BOILING POINT
>200 °C Product record

MELTING POINT
~ -50 °C (pour point) Product record

FLASH POINT
~171–185 °C (closed cup) Product record

VAPOR PRESSURE
Negligible Product record

SOLUBILITY (WATER)
Miscible with water Product record

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

MATERIALS OF CONSTRUCTION

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
Buna-N (NBR) Elastomer	Fair	60	Acceptable for alcohols; poor for ketones.	Parker O-ring Chemical Compatibility
EPDM Elastomer	Fair	—	Good for alcohols, poor for esters	Cole-Parmer Chemical Compatibility
Viton (FKM) Elastomer	Fair	80	Swells in acetone and esters; avoid for those.	Parker O-ring Chemical Compatibility
FFKM (Kalrez) Fluoropolymer	Excellent	200	Premium ester / ketone sealing	Cole-Parmer Chemical Compatibility
PTFE Fluoropolymer	Excellent	200	Preferred for all polar solvents	Cole-Parmer Chemical Compatibility

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
Borosilicate Glass Glass Ceramic	Excellent	100	Universally inert.	Cole-Parmer Chemical Compatibility
Glass (borosilicate) Glass Ceramic	Excellent	100	Inert	Cole-Parmer Chemical Compatibility
316 stainless steel Metal	Excellent	60	Standard alcohol / ester service	Cole-Parmer Chemical Compatibility
316L Stainless Steel Metal	Excellent	80	Inert; preferred for high-purity solvent service.	Cole-Parmer Chemical Compatibility
Aluminium Metal	Good	40	Acceptable; avoid prolonged wet contact	Cole-Parmer Chemical Compatibility
Carbon steel Metal	Good	40	Acceptable for short-term storage	Cole-Parmer Chemical Compatibility
Carbon Steel Metal	Fair	50	Trace moisture causes rust; flash-rust prevention required.	Cole-Parmer Chemical Compatibility
HDPE Thermoplastic	Fair	40	Swells with many polar solvents; verify per solvent.	Cole-Parmer Chemical Compatibility
PP Thermoplastic	Good	50	Acceptable but watch swelling with esters	Cole-Parmer Chemical Compatibility
PVC Thermoplastic	Fair	25	Esters soften PVC; avoid for esters	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
Not regulated Adjudicated

HAZARD CLASS
Not regulated Adjudicated

PACKING GROUP
Not regulated Adjudicated

PROPER SHIPPING NAME
Not regulated Adjudicated

GHS / OSHA HAZCOM 2012

SIGNAL WORD
Not regulated Adjudicated

H-CODES (HAZARD STATEMENTS)
— unknown

P-CODES (PRECAUTIONARY STATEMENTS)
— unknown

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)
— unknown

ACGIH TLV
— unknown

NIOSH REL
— unknown

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 Polyethylene Glycol 200 (PEG 200) - Technical Grade. Every file included is SHA-256 hashed and listed in a manifest your QA team can audit.

APPLICATION GUIDANCE

Polyethylene Glycol 200 (PEG 200) - Technical Grade is a polar solvent. Grade selection (technical, ACS, electronics, USP) determines acceptable residue and impurity levels for the intended end-use.

- Cleaning and degreasing (technical-grade)
- Coatings, inks, and adhesives formulation
- Reaction solvent for chemical synthesis
- Pharmaceutical manufacturing (USP-grade)
- Electronics-grade cleaning and rinse applications

Flammable. Bond and ground equipment during transfer. Verify grade matches end-use specification before substitution.

STORAGE & HANDLING

RECOMMENDED STORAGE

Cool, well-ventilated flammable-liquid storage area. Tightly sealed original containers. Segregate from oxidizers and acids. Bond and ground bulk...

HANDLING PRECAUTIONS

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

INCOMPATIBILITIES

Strong oxidizers, strong acids, isocyanates, anhydrides. Hygroscopic — protect from atmospheric moisture for water-sensitive end...

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.

TEST METHODS

PARAMETER	METHOD	AUTHORITY	UNIT
Acidity	Titration	—	%
Aldehydes	Spectrophotometry	—	ppm
Appearance	Visual Inspection	—	
Arsenic	ICP-MS	—	ppm
Ash	Residue on Ignition	—	%

PARAMETER	METHOD	AUTHORITY	UNIT
Assay	GC	—	%
Carbonate	Titration	—	%
Chloride	ICP	—	ppm
Color	APHA	—	APHA
Deg Content	GC	—	%
Iron	ICP-MS	—	ppm
Lead	ICP-MS	—	ppm
Nvr	Evaporation	—	mg/100mL
pH	pH Meter	—	
Refractive Index	Refractometer @ 20°C	—	
Residue	Residue on Ignition	—	%
Specific Gravity	Hydrometer @ 25°C	—	g/mL
Sulfate	ICP	—	ppm
Uv 220	UV Spectrophotometry	—	%T
Uv 275	UV Spectrophotometry	—	%T
Uv 350	UV Spectrophotometry	—	%T
Water	Karl Fischer	—	%

Methods listed are those used to generate the referenced COA. Equivalent or compendial methods may be substituted with documented bridging.

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.