TECHNICAL DATA SHEET

Polyethylene Glycol 200 (PEG 200) - Technical Grade

Technical

CAS NUMBER	ALLIANCE CODE	GENERATED
25322-68-3	polyethylene-glycol-200-peg-200-technical-grade	2026-09-01

REVISION	REVIEWED
1.1	2026-07-16 · Andre Taki

IDENTITY & COMPOSITION

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

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

GRADE
Technical

CONCENTRATION
—

CAS NUMBER
25322-68-3 Adjudicated

FORMULA
H(OCH2CH2)nOH Adjudicated

MOLECULAR WEIGHT
200 Adjudicated

PRODUCT TYPE
—

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Water content	Max 0.4 wt%	0.15 Wt. %	—	Supplier specification
Average molecular weight	190 - 210	200	—	Supplier specification

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Hydroxyl value	534 - 590 mgKOH/g	562	—	Supplier specification
Identity (IR)	passes test	Passes test	—	Supplier specification
OHV (Hydroxyl) Value	534 - 590 Mg KOH/g	562	—	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
Technical	—	—	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

PROPERTY	VALUE	SOURCE
Appearance	Clear, colorless viscous liquid	Published reference
Form	Liquid	Published reference
Color	A - 40 Max.	Supplier specification
Odor	Mild/odorless	Published reference
pH	5 - 7	Supplier specification
Specific Gravity (20 °C)	~1.12	Published reference
Density	1.124 - 1.126	Supplier specification
Boiling Point	>200 °C	Published reference
Melting Point	~ -50 °C (pour point)	Published reference
Flash Point	~171-185 °C (closed cup)	Published reference
Vapor Pressure	Negligible	Published reference
Solubility (water)	Miscible with water	Published reference
Refractive Index (nD 20)	1.4570 - 1.4620	Interpreted

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)
— **no canonical**

P-CODES (PRECAUTIONARY STATEMENTS)
— **no canonical**

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.

APPLICATION GUIDANCE

Polyethylene Glycol 200 (PEG 200) - Technical Grade (Technical) is a glycol-based heat-transfer and freeze-protection fluid. Concentration sets the freeze and burst protection; the inhibitor package sets how long the system stays protected from corrosion.

- Closed-loop heat transfer and process cooling
- Data-centre and chilled-water freeze protection
- HVAC hydronic loops and glycol makeup
- Freeze and burst protection for idle or seasonal systems
- Humectant and carrier applications (USP/food-grade propylene glycol only)

Verify concentration against the required freeze and burst protection, and confirm elastomer and metallurgy compatibility for the service temperature. Ethylene glycol is toxic by ingestion and must not be used where incidental food or potable contact is possible — specify a propylene glycol grade for those services.

STORAGE & HANDLING

RECOMMENDED STORAGE

Cool, dry, well-ventilated area in tightly sealed original containers. Neat glycols are combustible liquids with high flash points (roughly 99–111 °C) and do not require a solvent store; aqueous blends will not sustain combustion. Protect inhibited coolants from contamination and from freezing below their stated protection point.

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

HANDLING PRECAUTIONS

Chemical-resistant gloves and splash goggles. Ethylene glycol grades are toxic by ingestion and must be kept away from food, drink and animals; propylene glycol grades are not. Avoid contact with hot surfaces and hot process equipment. Inhibitor packages deplete in service — monitor rather than top up blindly.

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

INCOMPATIBILITIES

Strong oxidizers, strong acids and strong bases. Galvanized (zinc) surfaces are attacked by many inhibited coolant packages. Verify elastomer and gasket compatibility for the service temperature; EPDM is standard for glycol/water service.

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

SHELF LIFE

Consult Technical Services for product-specific shelf life

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)

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Not regulated for transport.
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Confirm against shipping documents and carrier requirements before tender.

NMFC CLASS

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REVISION HISTORY

Last reviewed 2026-07-16 by Andre Taki, DOT Hazmat Specialist.

VERSION	DATE	CHANGE	TRIGGER
1.1	2026-07-16	Canonical data re-verified: 10 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) • dotProperShippingName · canonical adjudication / reground (coa.data_provenance) • dotSubsidiaryHazardClass · canonical adjudication / reground (coa.data_provenance) • ghsClassification · canonical adjudication / reground (coa.data_provenance) • hazardClass · canonical adjudication / reground (coa.data_provenance) • hsCode · canonical adjudication / reground (coa.data_provenance) • packingGroup · canonical adjudication / reground (coa.data_provenance) • physicalProperties · canonical adjudication / reground (coa.data_provenance) • signalWord · canonical adjudication / reground (coa.data_provenance) • unNumber · 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.