

TECHNICAL DATA SHEET

Perchloroethylene ACS Grade

ACS Grade

CAS NUMBER

127-18-4

ALLIANCE CODE

perchloroethylene-acs-grade

GENERATED

2026-07-18

1. IDENTITY & COMPOSITION

PRODUCT NAME

Perchloroethylene ACS Grade

ALLIANCE CODE

perchloroethylene-acs-grade

GRADE

ACS Grade

CONCENTRATION

—

CAS NUMBER

127-18-4 [PubChem](#)

FORMULA

C2Cl4 [PubChem](#)

MOLECULAR WEIGHT

165.8 [PubChem](#)

PRODUCT TYPE

pure_substance

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.

FORM

Liquid [Product record](#)

ODOR

Ether-like odor [Product record](#)

DENSITY

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

BOILING POINT

250 °F at 760 mmHg (NTP, 1992) [Product record](#)

MELTING POINT

–2 °F (NTP, 1992) [Product record](#)

FLASH POINT

No flash point in conventional closed tester. [Product record](#)

VAPOR PRESSURE

14 mmHg at 68 °F ; 15.8 mmHg at 72 °F (NTP, 1992) [Product record](#)

SOLUBILITY (WATER)

less than 0.1 mg/mL at 63 °F (NTP, 1992) [Product record](#)

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER

UN1897 [Vendor Label](#)

PACKING GROUP

III [Adjudicated](#)

HAZARD CLASS

6.1 [Adjudicated](#)

PROPER SHIPPING NAME

TETRACHLOROETHYLENE [Adjudicated](#)

GHS / OSHA HAZCOM 2012

SIGNAL WORD

Danger [Adjudicated](#)

H-CODES (HAZARD STATEMENTS)

H315, H317, H319, H336, H351, H370, H373, H411

[Adjudicated](#)

P-CODES (PRECAUTIONARY STATEMENTS)

P201, P202, P260, P264, P270, P273, P280, P281,
P308+P311, P308+P313, P314, P391, P405, P501

[Adjudicated](#)

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

100 ppm TWA / 200 ppm acceptable ceiling /
300 ppm 5-min peak [OSHA 29 CFR 1910.1000](#)

ACGIH TLV

— [unknown](#)

NIOSH REL

Ca (carcinogen — minimize occupational
exposure) [NIOSH Pocket Guide](#)

NIOSH IDLH

150 ppm [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.

Supplier Qualification Packet

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

APPLICATION GUIDANCE

Perchloroethylene ACS Grade (ACS 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.

PACKAGING & LOGISTICS

SHIPPING DESCRIPTION (US DOT)

UN1897, TETRACHLOROETHYLENE, 6.1, PG III

Sourced from 49 CFR 172.101. Confirm against shipping documents and carrier requirements before tender.

NMFC CLASS 70	PLACARD Toxic	PACKING GROUP PG III
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REVISION HISTORY

Last reviewed 2026-07-17 by Andre Taki, DOT Hazmat Specialist.

VERSION	DATE	CHANGE	TRIGGER
1.1	2026-07-17	Canonical data re-verified: 6 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) - 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) - signalWord · canonical adjudication / reground (coa.data_provenance)	canonical_change

VERSION	DATE	CHANGE	TRIGGER
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.

ALLIANCE CHEMICAL

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