

TECHNICAL DATA SHEET

Perchloroethylene (PCE, PERC)

CAS NUMBER

127-18-4

ALLIANCE CODE

perchloroethylene-pce-perc

GENERATED

2026-07-17

1. IDENTITY & COMPOSITION

PRODUCT NAME

Perchloroethylene (PCE, PERC)

ALLIANCE CODE

perchloroethylene-pce-perc

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 [Adjudicated](#)

PACKING GROUP

III [Adjudicated](#)

HAZARD CLASS

6.1 [Adjudicated](#)

PROPER SHIPPING NAME

TETRACHLOROETHYLENE [Adjudicated](#)

GHS / OSHA HAZCOM 2012

SIGNAL WORD

Warning [Adjudicated](#)

H-CODES (HAZARD STATEMENTS)

H315, H317, H319, H336, H351, H411 [Adjudicated](#)

P-CODES (PRECAUTIONARY STATEMENTS)

P201, P202, P273, P280, P281, P308+P313, 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 (PCE, PERC). Every file included is SHA-256 hashed and listed in a manifest your QA team can audit.

APPLICATION GUIDANCE

Perchloroethylene (PCE, PERC) 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

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

Order Perchloroethylene (PCE, PERC)

Bulk & packaged sizes · COA/SDS ships with every order