TRIETHYLENE GLYCOL

INDUSTRIAL GRADE · VIRGIN · CAS 112-27-6

Virgin triethylene glycol, 99.5 wt% minimum assay. A clear, colorless, odorless, hygroscopic liquid of high boiling point and low volatility, used as a dehydrating agent, solvent, humectant, and chemical intermediate.



01 IDENTIFICATION

PRODUCT CODE	CHEMICAL IDENTITY	SYNONYMS	SDS REFERENCE	MANUFACTURER
TEG99	CAS 112-27-6 · EC 203-953-2 $C_6H_{14}O_4$ · 150.17 g/mol	TEG; Triglycol; 2,2′ -[Ethylenebis(oxy)]diethanol	Triethylene Glycol SDS, Revision 2	Coastline Chemical, Inc. · 30426 Depot Street, New Church, VA 23415

02 PRODUCT DESCRIPTION

Coastline Chemical, Inc. Triethylene Glycol, Industrial Grade is a **virgin** triethylene glycol. It is a clear, colorless, odorless, hygroscopic liquid with a high boiling point and low volatility, completely miscible with water and soluble in many polar organic solvents. It is produced under controlled manufacturing and quality systems to maintain consistent composition and low impurity levels. Principal applications are natural gas dehydration, liquid desiccant dehumidification, and use as a high-boiling solvent, humectant, and chemical intermediate.

03 PRODUCT SPECIFICATIONS · QC RELEASE CRITERIA

PARAMETER	SPECIFICATION	TEST METHOD
Triethylene Glycol	**99.5 wt% min**	ASTM E2409
Other Glycols, Oligomers	**0.5 wt% max**	ASTM E2409
Water	**0.10 wt% max**	ASTM E203
Acidity, as Acetic Acid	**0.005 wt% max**	ASTM D1613
Relative Density, d 20/20°C	**1.120 – 1.126**	ASTM D1122
Refractive Index, n_D 20°C	**1.448 – 1.459**	ASTM D1218
Color, APHA	**25 max**	ASTM D1209
Iron	**1.0 ppm max**	ASTM E394
Ash	**0.005 wt% max**	ASTM D1119

- *Specifications are QC release criteria; batch values are reported on the Certificate of Analysis, against any agreed customer specification, which may be tighter than the limits above. Percentages are by weight. Relative density is d 20/20°C; refractive index is at the sodium D line (589.3 nm).*

© 2026 Coastline Chemical, Inc. All rights reserved.

04 PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE	**Liquid**	**BOILING POINT, 1 ATM**	**545°F (285°C)**
APPEARANCE	**Clear, colorless**	**FLASH POINT**	**350°F (177°C), PMCC**
ODOR	**Odorless**	**AUTO-IGNITION**	**approx. 700°F (371°C)**
SOLUBILITY IN WATER	**Complete (miscible)**	**VAPOR PRESSURE, 20°C**	**< 0.01 mmHg**
PH, 50% AQUEOUS	**7.5 – 8.5 (typical)**	**VAPOR DENSITY**	**5.2 (air = 1)**
FREEZE POINT	**19°F (–7°C)**		

- *Values are typical and are not release specifications unless also listed in section 03. Consistent with Triethylene Glycol SDS, Revision 2.*

05 TYPICAL LITERATURE PROPERTIES

PROPERTY	VALUE
Dynamic Viscosity, 20°C	**47.4 cP (mPa·s)**
Dynamic Viscosity, 25°C	**37.1 cP (mPa·s)**
Kinematic Viscosity, 20°C	**42.2 cSt (mm^2/s)**
Surface Tension, 25°C	**45.1 mN/m**
Specific Heat, 25°C	**2.2 J/g·K (0.52 Btu/lb·°F)**
Thermal Conductivity, 25°C	**0.192 W/m·K (0.111 Btu/hr·ft·°F)**
Heat of Vaporization, 285°C	**61 kJ/mol (406 kJ/kg)**

- *These are not batch specifications and are not reported on the Certificate of Analysis.*

06 APPLICATIONS

NATURAL GAS DEHYDRATION
Removal of water vapor from produced, gathering, transmission, and storage gas.

LIQUID DESICCANT DEHUMIDIFICATION
Air dehumidification in commercial and industrial climate control.

HEAT TRANSFER
Closed-loop heating and cooling circuits calling for a high-boiling, low-volatility fluid. Thermophysical data in section 05. Provide corrosion control appropriate to the system metallurgy.

SOLVENT & EXTRACTION
Solvent and extraction medium for aromatic extraction and gas purification.

CHEMICAL INTERMEDIATE
Raw material for polyester resins, plasticizers, polyurethanes, and other specialty chemical synthesis.

HUMECTANT & PLASTICIZER
Moisture retention in industrial formulations, and plasticizer for vinyl and cellulose-based resins. Industrial use only.

© 2026 Coastline Chemical, Inc. All rights reserved.

07 STORAGE & HANDLING

STORAGE CONDITIONS

Store in tightly closed, labeled containers in a cool, dry, well-ventilated area away from heat and ignition sources. Keep sealed; the product is hygroscopic and picks up water from the air.

RECOMMENDED MATERIALS

Carbon steel, stainless steel (304, 316), and HDPE are suitable for storage and transfer. Avoid galvanized and zinc-bearing surfaces in heated service.

STABILITY & INCOMPATIBILITIES

Incompatible materials include strong oxidizing agents, strong acids, strong bases, and alkali metals. Avoid prolonged temperatures above 400°F (204°C), particularly in the presence of air; see SDS section 10. Protect the stored product from contamination.

HANDLING PRECAUTIONS

Use safety glasses and chemical-resistant gloves; ensure ventilation. Avoid breathing mists and prolonged skin contact. Refer to the Safety Data Sheet for complete information.

- *No expiration date or shelf life is assigned. Verify the product against the specifications in section 03 before use after extended storage, or if the container seal has been broken or storage conditions compromised.*

08 PACKAGING & ORDERING

CONTAINER TYPE	NOMINAL VOLUME	NET WEIGHT (APPROX.)	ORDER CODE
Drum	**55 U.S. gal (208 L)**	**516 lb (234 kg)**	**55TEG99**
Tote (IBC)	**275 U.S. gal (1,041 L)**	**2,582 lb (1,171 kg)**	**275TEG99**
Bulk Tanker (road)	**As ordered**	**Contact for details**	**BTEG99**

- *Net weights are calculated at a relative density of 1.125 and are nominal. Custom packaging is available on request; contact your Coastline representative for bulk and specialty options. Contact sales to confirm marine-bulk availability.*

09 REGULATORY & QUALITY ASSURANCE

TSCA STATUS	Listed on the TSCA Chemical Substance Inventory
DOT CLASSIFICATION	Not regulated as a hazardous material for the product as supplied; see SDS section 14
USE RESTRICTIONS	Not for use in food, drug, cosmetic, or potable-water applications
OSHA HAZARD	Not classified as hazardous under 29 CFR 1910.1200
QUALITY SYSTEM	Documented production, storage, loading, and quality-control program
ORIGIN	Made in USA

Each lot is released against the QC criteria in section 03 based on in-process and final testing, and ships with a Certificate of Analysis reporting the measured values. Where a customer requires tighter or additional limits, the Coastline technical team can agree on a supplementary specification.

ORDERING & TECHNICAL SUPPORT

PHONE	WEB	SDS	COA
(757) 824-3831	**coastlinechemical.com**	**Current revision on request**	**With every shipment**

The information in this Technical Data Sheet is believed to be accurate and represents the best information currently available. Coastline Chemical, Inc. makes no warranty, express or implied, including warranties of merchantability or fitness for a particular purpose, with respect to the information herein, and the data presented should not be construed as a guarantee of product performance. Specifications are subject to change without notice; all values are typical unless stated as QC release criteria.

Users should conduct their own tests to determine suitability of the product for their specific applications. For technical assistance or application review, contact your Coastline representative.

© 2026 Coastline Chemical, Inc. All rights reserved.