



Shell Chemicals

Cargo Handling Sheet

Caradol ED28-200

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Revision 3

Cargo Handling Sheets are for the use of vessels chartered on behalf of Shell Chemicals

Product Details

Product Name:	Caradol ED28-200
IMO Product Name:	Polypropylene Glycol
Chemical Family:	Glycol
Product Code:	U1790

SDS: <http://www.shell.com/business-customers/chemicals/safe-product-handling-and-transportation/safety-data-sheets.html>

Physical Properties

Density:	Typical 1002 kg/m ³ (20 °C / 68 °F)
Dynamic Viscosity:	980 mPa.s (25 °C / 77 °F)
Vapor Pressure:	Data not available
Boiling Point:	Data not available
Melting Point:	Data not available
Flash Point:	> 180 °C / 356 °F
Appearance:	Clear colourless liquid

Note 1: Physical Properties are for reference only and valid as of date of this revision; see loading terminal for specific properties.

Note 2: Hazard Identification: Not classified as a physical hazard or health hazard under GHS criteria; Polymerises exothermically with di-isocyanates at ambient temperatures. See SDS for full list of hazards and precautions.

Transshipment

Prior to arranging transshipment, Charterers must agree to Owner's proposed plan. When arranged by the Owner, Owner must ensure that all transshipment vessels comply with the requirements of this cargo handling sheet.

Marpol Details

Marpol Annex:	II
IMO Ship Type:	3, must be double hulled
Inland Barges:	Double Hull
IMO Pollution Category:	Z

IBC 16.2.6:	No
IBC 16.2.9:	No
Pre-Wash Required:	No
Compatibility Group:	USCG compatibility group 40; reacts with di-isocyanates

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior Loading:	No
N2 Blanket Required:	No
Adjacent Space Purge:	No
Loading Temperature Range:	35 - 40 °C / 95 – 104 °F
Transit Temperature Range:	30 °C – 55 °C / 86 °F – 131 °F
Discharge Temperature Range:	30 °C – 55 °C / 86 °F – 131 °F
Maximum Heating Coil Temperature:	100 °C / 212 °F
Maximum Adjacent Temperature:	55 °C / 131 °F

Regional Requirements

None

Tank Acceptance Requirements

All nominated shipboard cargo handling systems are to be presented clean (residual free), dry, odor free, rust free, with good gaskets, fit to load this cargo.

Maintenance of heating coils is to be verified in the ship's log. If product is to be heated, heating coils are to be confirmed leak free. If product is not heated, heating coils are to be blown clear and dried with N2 and blanked off.

Stainless Steel or Coated Tank:	All coatings allowed except for Zinc; Carrier to verify suitability of coating
Banned Prior Cargo:	No
Wall Wash Required:	Yes; all conducted with Methanol except PH test, which uses DI water

Coated Tanks: WWT conducted by cargo surveyor.

Stainless Steel Tanks: verification of shipboard WWT may be accepted if below specs are met. (Send WWT Verification to the responsible Shell Chemicals charterer and present to cargo surveyor and loading master at loading terminal.)

Wall Wash Test:	Specification	Standard
Hydrocarbons	Pass	ASTM D1722
Chlorides	< 1 ppm	IMPCA 002-98
Color Test	< 5 Pt/Co Max	ASTM D1209
Appearance:	Clear, free of suspended matter	ASTM D4176

Additional WWT for Coated Tanks if Prior Cargo is:

Prior Cargo	Wall Wash Test:	Specification	Standard
Acrylate	PPT	> 30 minutes	ASTM D1363
Oils, Waxes, Veg Oils, Fame	NVM	100 ppm	ASTM D1353
Acids, Alkalis	PH Test	6.9 – 7.1	ASTM E70

Link to: [WWT Verification Form](#)

Safety Information and Incident Reporting

Safety Information:

HSSE information can be found in the SDS or e-SDS.

Incident Reporting:

All incidents should be reported in accordance with regulations and charter party requirements.

International Registered Vessels: If an incident occurs call Shell International Trading and Shipping in London on +442079347777.

Jones Act Vessels: call the Shell 24 hr. incident number at +17132412532. The USA National Response Center telephone number is +18004248802.

For additional marine cargo handling advice or information, contact the responsible regional Shell Chemicals Marine Technical Advisor.



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