

Shell Chemicals

Cargo Handling Sheet

Monopropylene Glycol Industrial

Document Date: 05 March 2021

Revision 6

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

Product Details

Product Name: Monopropylene Glycol - Industrial

IMO Product Name: Propylene Glycol

Chemical Family: Glycol

Product Code: U1511, U1518, U1520, U1525

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

Physical Properties

Density: 1036 kg/m3 (20 °C / 68 °F)

Dynamic Viscosity: 43.4 mPa.s (25 °C / 77 °F)

Vapor Pressure: ca. 7 Pa (20 °C / 68 °F)

Boiling Point: 186 - 189 °C / 367 - 372 °F

Melting Point: $< -20 \,^{\circ}\text{C} / < -4 \,^{\circ}\text{F}$

PH: 7

Flash Point: $104 \,^{\circ}\text{C} / 219 \,^{\circ}\text{F}$

Appearance: Colourless liquid, odourless

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; See SDS for full list of hazards and precautions.

Transhipments Prior to arranging transhipment Charterer must agree to Owner's

proposed plan. When arranged by the Owner, Owner must ensure that all transhipment vessels comply with the requirements of this

cargo handling sheet.

Marpol Details

Marpol Annex:

IMO Ship Type: IBC Chapter 18 cargo, must be double hulled

Inland Barge: Double Hull

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IMO Pollution Category: OS

IBC 16.2.6: No

IBC 16.2.9:

Pre-Wash Required: No

Compatibility Group: USCG compatibility group 20, not compatible with group 12 Isocyanates.

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior Loading: No

N2 Blanket Required: No

Adjacent Space Purge: No

Loading Temperature Range: Ambient

Transit Temperature Range: Ambient - 50 °C / 122 °F

Discharge Temperature Range: Ambient - 50 °C / 122 °F

Maximum Heating Coil Temperature: Blanked off

Maximum Adjacent Temperature: 50 °C / 122 °F

Note 1: For quality purposes, this product should not be carried in tanks serviced by a cargo pump room.

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 Tanks: Either Banned Prior Cargo: None

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:SpecificationStandardAppearanceClear and free from suspended matterASTM D4176Hydrocarbons= PassASTM D1722Chlorides≤ 1.0 ppmIMPCA 002-98Colour Test< 5 Pt/Co Max</td>ASTM D1209

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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