

Shell

Cargo Handling Sheet

Toluene

Document date: 12 May 2023

Revision 5

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

Cargo Handling Sheet: Toluene Document Date: 12 May 2023 Revision 5

Product Details

Trade Name: Toluene

IMO Product Name: Toluene

Chemical Family: Aromatic Hydrocarbon

Product Code: Q9131, Q9138, Q9250, Q9300, Q9308, T1402, X211H

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

Physical Properties

Density: 871 kg/m3 (15 °C / 59 °F)

Kinematic Viscosity: 0.63 mm2/s (25 °C / 77 °F)

Vapor Pressure: 3.5 kPa (20 °C / 68 °F)

Boiling Point: 110 - 111 °C / 230 - 232 °F

Melting Point: -95 °C / -139 °F

Flash Point: 4 °C / 39 °F

Appearance: Colourless

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: Highly flammable, Static accumulator. See SDS for full list of hazards and precautions.

Transhipment 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: 3, must be double hull

Inland Barge: Double hull

IMO Pollution Category: Y

IBC16.2.6: No

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IBC 16.2.9:

Pre-Wash Required: No

Compatibility Group: USCG compatibility group 32

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior Loading

Not a Product Quality requirement; see notes below

N2 Blanket Required: No a Product Quality requirement; see noted below

Adjacent Space Purge: No

Loading Temperature Range: Ambient – 40 °C / 104 °F

Transit Temperature Range: Ambient – 40 °C / 104 °F

Unloading Temperature Range: Ambient – 40 °C / 104 °F

Maximum Heating Coil Temperatur: Blanked off

Maximum Adjacent Temperature: 40 °C / 104 °F

Note 1: If vessel is required to inert tanks, then only N2 will be accepted as an inerting medium.

Note 2: If Nitrogen blanket is in place and Carrier chooses to tranship, carrier must reapply nitrogen blanket on the cargo, both on the unloading and receiving vessel, at their time, risk, and expense.

Regional Requirements

Note 3: US Barge: Coatings acceptable Stainless Steel, Mild Steel, Zinc, Epoxy; N2 not required / N2 pre-load purge and after load N2 pad required. Vapor Return – may be required depending on terminal Air Quality Permit; Heating – No

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: Either, carrier to verify suitability of coating for product

Prior Cargo Restrictions: No Wall Wash Required: No

Safety Information and Incident Reporting

Safety Information: Refer the SDS (Safety Data Sheet) or e-SDS.

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

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



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