

Cargo Handling Sheet

Non-Shell Product

Benzene

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Revision 2

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

Information is obtained from supplier's SDS and other reference publications.

Product Details

Product Name:	Benzene
Shipping Name:	Benzene and mixtures having 10% benzene or more
Chemical Family:	Aromatic Hydrocarbon
Product Code:	Non-Shell product
SDS:	Get from loading terminal or charterer

Physical Properties

Density:	883 kg/m ³ (15 °C / 59 °F)
Dynamic Viscosity:	0.6 mPa.s (20 °C / 68 °F)
Vapor Pressure:	10 kPa (20 °C / 68 °F)
Boiling Point:	80.1 °C / 176.2 °F
Melting Point:	5.5 °C / 41.9 °F
Flash Point:	-11 °C / 12 °F
Auto-ignition temperature:	498 °C / 928 °F
Appearance:	Colourless with aromatic odour

Note 1: Physical Properties are for reference only; see loading terminal for specific properties

Note 2: This product is a static accumulator.

Note 3: This product is Toxic and Carcinogenic.

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:	II
IMO Ship Type:	3, must be double hull
Inland Barges:	Double Hull

IMO Pollution Category:	Y
IBC 16.2.6:	No
IBC 16.2.9:	Yes
Pre-Wash Required:	Not if discharged in accordance with MARPOL
Compatibility Group:	USCG compatibility group 32

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior to Loading:	No
N2 Blanket Required:	Not a PQ requirement; see notes below; < 8% O2 if required
Adjacent Space Purge:	No
Loading Temperature Range:	Ambient (see notes below and Regional Requirement)
Transit Temperature Range:	Ambient (see note 1 below)
Discharge Temperature Range:	Ambient (see note 1 below)
Maximum Heating Coil Temperature:	60 °C / 140 °F (see note 1 below)
Adjacent Maximum Cargo Temperature:	40 °C / 104 °F

Note 1: Minimum handling temperature for Benzene is 11 °C / 52 °F.

Note 2: If vessel must inert tanks in accordance with regulation and/or Shell Chemical Inert Gas Clause, then only N2 will be accepted as an inerting medium.

Note 3: If Nitrogen blanket is in place and Carrier chooses to tranship, carrier must reapply nitrogen blanket on the cargo, both on the discharging and receiving ship, at their time, risk, and expense.

Note 4: If loaded below 16°C / 61°F or if during voyage cargo temperature drops to < 16°C / 61°F, Shell Chemical Charterer should be notified.

Regional Requirements

Note 1: In Europe minimum load temperature for barges is set to 20 °C / 68 °F

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
Banned Prior Cargo: No
Wall Wash Required: No

Safety Information and Incident Reporting

Safety Information:

For more detailed information, refer to the SDS or e-SDS for reportable spill/release quantities whether in the water, air or ground.

Incident Reporting for vessels on Shell charter.

International Registered Vessels: 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 centre telephone number is +18004248802.

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