



SHELL CARGO HANDLING SHEET

Benzene

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

Product Details

Trade Name:	Benzene, Sustainable Benzene, Circular Benzene, Bio-Circular Benzene, BC Benzene
IMO Product Name:	Benzene and mixtures having 10% benzene or more
Chemical Family:	Aromatic Hydrocarbon

[Link to Safety Data Sheet](#)

Physical Properties

Density:	883 kg/m ³ at 15 °C / 59 °F
Dynamic Viscosity:	0.60 mPas at 20 °C / 68 °F
Vapor Pressure:	10 kPa at 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 liquid with aromatic odour

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: Flammable, Static accumulator, toxic, carcinogen, may solidify; See SDS for full list of hazards and precautions.

Marpol Details

Marpol Annex:	II
IMO Ship Type:	3; must be double hull
Inland Barge:	Double Hull
IMO Pollution Category:	Y
IBC 16.2.6:	No
IBC 16.2.7	No
IBC 16.2.9:	Yes
Prewash Required:	No prewash required when discharged in accordance with CHS

Compatibility Group: USCG compatibility group 32

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior Loading:	No
N2 Blanker Required:	Not a Product Quality requirement; see notes below
Adjacent Space Purge:	No
Loading Temperature Range:	Ambient (see notes below and Regional Requirement)
Transit Temperature Range:	Ambient to 40°C / 104°F (see note 1 below)
Unloading Temperature Range:	Ambient to 40°C / 104°F (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 loaded below 16°C / 61°F or if during voyage cargo temperature drops to < 16°C / 61°F, Shell Charterer should be notified.

Note 3: If vessel is required to inert tanks, then only N2 will be accepted as an inerting medium.

Note 4: 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.

Regional Requirement

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

Note 2: US Barge: Coatings – Stainless Steel, Mild Steel, Zinc, Epoxy; N2 not required; Vapor Return – yes; Heating – possible.

Transshipments

Prior to arranging transshipment Charterer 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.

Tank Acceptance Requirement

Banned Prior Cargo:

No

Stainless Steel or Coated Tanks:

Either, carrier to verify suitability of coating for the product

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.

Wall Wash Test Requirement

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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