



# **SHELL CARGO HANDLING SHEET**

## **Butadiene**

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

## Product Details

Trade Name:	Butadiene, Butadiene Sustainable
IMO Product Name:	Butadiene (all isomers)
Chemical Family:	Diene, also Diolefins

[Link to Safety Data Sheet](#)

## Physical Properties

Density:	622 kg/m <sup>3</sup> at 20 °C / 68 °F
Vapor Pressure:	580 kPa at 50 °C / 122 °F
Boiling Point:	-4.4 °C / 24.1 °F
Melting Point:	-108.9 °C / -164 °F
Flash Point:	-79 °C / -110 °F
Appearance:	Colourless, mild 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, See SDS for full list of hazards and precautions.

## Marpol Details

IMO Ship Type:	2G/2PG
IGC Hazards:	Flammable, Toxic
Inland Barge:	Pressure barge; see regional requirements.

## Cargo Handling Requirements

Purge Cargo Tanks Prior Loading:	Condition with product to expel N <sub>2</sub> .
Pre-load Purge Oxygen Content:	< 0.2%
Loading Temperature Range:	-4 °C / 24.8 °F to 10 °C / 50 °F subject to ship type and terminal requirements; consult loading terminal prior to arrival.
Transit Temperature Range:	-4 °C / 24.8 °F in refrigerated tankers, to ambient in pressurised tankers.

Unloading Temperature Range: -4°C / 24.8°F to 19°C / 66.2°F subject to ship type and terminal requirements; consult loading terminal prior to arrival.

**Note 1: DAILY LOG:** During the voyage the vessel shall maintain a daily log of the following and the log shall be sent to the Shell Charterer/Planner/Operator up on completion of unloading, and on request. Tank pressure and temperature.

## Regional Requirement

**Note 1:** Inland Barge EUAF - ADN Type G

**Note 2:** Loaded in Europe; For voyages up to 4 days, carriage at ambient temperature in pressure tankers may be considered. For longer voyagers, butadiene to be carried in (semi) refrigerated tankers at - 4°C.

## 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	
Prior Cargoes:	Consult Shell Charterer/Planner/Operator
Dewpoint:	< -10 °C / 14 °F
Peroxide Level:	< 5 ppmw

## 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.



Shell Trading (US) Company  
P. O. BOX 4604  
Houston,  
TX 77210-4604 USA

### Disclaimer

The information contained in this publication is, to the best of our knowledge, true and accurate, but any recommendations or suggestions that may be made are without guarantee, since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

## Shell

The expression "Shell" refers to the companies of the Shell Group of companies that are engaged in the chemical businesses.  
Each of the companies that make up the Shell Group of companies is an independent entity and has its own separate identity.