



Shell

Cargo Handling Sheet

Raffinate 1

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Revision 1

*Cargo Handling Sheets are for the use of vessels
chartered by Shell*

Product Details

Product Name: Raffinate 1
IMO Product Name: Mixed C4 Cargoes
Chemical Family: Gases (petroleum), light steam-cracked, butadiene concentrate
Product Code: X2033, X2035, X2134, X2135, ZA025

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

Physical Properties

Relative Density: 0.6
Vapor Pressure: 250 kPa (20 °C / 68 °F)
Boiling Point: < 0 °C / 32 °F
Melting Point: Data Not Available
Flash Point: < -50 °C / < -58 °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: Extremely flammable, Toxic, Static accumulator, May form explosive peroxides, vapour is heavier than air; 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

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

Cargo Handling Requirements

Purge Cargo Tanks Prior Loading: Condition with product to expel N2
Pre-load Purge Oxygen Content: < 0.3%

Loading Temperature Range:	Ambient for pressurised and semi-pressurised gas carriers
Transit Temperature Range:	Ambient for pressurised and semi-pressurised gas carriers
Discharge Temperature Range:	Ambient for pressurised and semi-pressurised gas carriers

Regional Requirements

Note 1: Inland Barge EUAF- ADN Type G

Tank Acceptance Requirements

Dew-point:	< -10°C / 14 °F
Peroxide Level:	Not Applicable
Prior Cargoes:	Consult Shell Charterer

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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