

Shell Chemicals

Cargo Handling Sheet

Heavy Olefin Feed

Document Date: 16 June 2017

Revision 1

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

Product Details

Product Name: Heavy Olefin Feed

Shipping Name: Distillates (petroleum), light vacuum

Chemical Family: Vacuum Gas Oil

Product Code: X2257, X2302, X2877, X3093

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

Physical Properties

Density: 800 - 910 kg/m3 (15 °C / 59 °F)

Kinematic Viscosity: $2.5 - 11 \text{ mm}2/\text{s} (40 ^{\circ}\text{C} / 104 ^{\circ}\text{F})$

Vapor Pressure: $\leq 0.4 \text{ kPa} (38 \,^{\circ}\text{C} / 100 \,^{\circ}\text{F})$

Boiling Point: $>= 150 \,^{\circ}\text{C} / 302 \,^{\circ}\text{F}$

Melting Point: Data not available

Flash Point: 60 - 200 °C / 140 - 392 °F (see Regional Requirements)

Appearance: Yellow to Amber in colour

Note 1: Physical Properties are for reference only and valid as of date of this revision; see loading terminal for specific properties.

Note 2: This product is a Static Accumulator.

Note 3: This product may contain H2S.

Transhipment Prior to arranging transhipment, Charterers must agree to Owner's

proposed plan

Marpol Details

Marpol Annex:

IMO Ship Type: Double hull vessels certified for carriage of oil

Inland Barges: Double Hull

IMO Pollution Category: Annex I Oil

IBC 16.2.6: No

Cargo Handling Sheet: Heavy Olefin Feed Date: 16 June 2017 Revision 1

IBC 16.2.9:

Pre-Wash Required: No

Compatibility Group: USCG compatibility group 33

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior Loading: No

N2 Blanket Required:

Not a PQ requirement; see notes below

Adjacent Space Purge: No

Loading Temperature Range: 66 – 63 °C / 150 – 145 °F

Transit Temperature Range: $63 - 52 \,^{\circ}\text{C} / 145 - 125 \,^{\circ}\text{F}$

Discharge Temperature Range: 58 – 52 °C / 135 – 125 °F

Maximum Heating Coil Temperature: 66 °C / 150 °F

Adjacent Maximum Cargo Temperature: 52 °C / 125 °F

Note 1: 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 2: 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 3: PQ = Product Quality

Regional Requirements

Note 1: Prior to loading at Shell Mobile the flash point of HOF is tested and is usually not in the flammable range.

Note 2: Ship Manager to present prior cargoes to Shell Chemicals charterer prior to fixing.

Tank Acceptance Requirements

All shore and ship cargo lines and tanks are to be presented clean (residual free), dry, odour free, and rust free, with good gaskets.

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: None, See Regional Requirement Note 2

Revision 1

Wall Wash Required: None

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:

International Registered Vessels: If an incident occurs 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 Center telephone number is +18004248802.

For additional marine cargo handling advice or information, contact Captain Stephen Boudreaux at +17132413945 or Capt. Ben van Bemmel at +31104415992.



Shell Chemical LP

PO Box 4407 Houston Texas 77210 USA Tel +1 866 897 4355

Internet http://www.shell.com/chemicals

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 Chemicals

The expression "Shell Chemicals" 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.