

Shell Chemicals

Cargo Handling Sheet

Shell HVI 160B

Document Date: 11 August 2017

Revision 4

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

Cargo Handling Sheet: Shell HVI 160B Document Date: 11 August 2017 Revision 4

This Cargo Handling Sheet is produced on behalf of Shell Trading.

Product Details

Product Name: Shell HVI 160B

Shipping Name: Base Oil

Chemical Family: Paraffinic Base Oil

Product Code: 901R0039

SDS: Get from loading terminal or charterer

Physical Details

Density: 888 kg/m3 (15.0 °C / 59.0 °F)

Kinematic Viscosity: 100 mm2/s (40.0 °C / 104.0 °F)

Vapor Pressure: $< 0.5 \text{ Pa} (20 \,^{\circ}\text{C} / 68 \,^{\circ}\text{F})$

Boiling Point: $> 280 \,^{\circ}\text{C} / 536 \,^{\circ}\text{F}$

Pour Point: -9 °C / 16 °F

Flash Point: 230 - 240 °C / 446 - 464 °F

Appearance: Amber

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

Transhipments Prior to arranging transhipment Charterer must agree as to Owner's

proposed plan.

Marpol Details

Marpol Annex: Annex I

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

Inland Barges: Double Hull

IMO Pollution Category: Annex I

IBC 16.2.6: Not Applicable

IBC 16.2.9: Not Applicable

Cargo Handling Sheet: Shell HVI 160B Document Date: 11 August 2017 Revision 4

Pre-Wash Required: Not Applicable; wash/disposal as per Annex I

Compatibility Group: USCG compatibility group 33

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior Loading: No

N2 Blanket Required:

Adjacent Space Purge: No

Loading Temperature Range: < 38 °C; may be higher if direct from plant

Transit Temperature Range: $30 - 35 \,^{\circ}\text{C} / 86 - 95 \,^{\circ}\text{F}$

Discharge Temperature Range: $40 - 45 \,^{\circ}\text{C} / 104 - 113 \,^{\circ}\text{F}$

Maximum Heating Coil Temperature: 60 °C / 140 °F

Adjacent Maximum Cargo Temperature: 50 °C / 122 °F

Note 1: Product to be allowed to drop to carriage temperature. Temperature of product not to be heated to >38 °C / 100 °F during the voyage.

Regional Requirements

None

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

Prior Cargo Restrictions: No Wall Wash Required: No

Cargo Handling Sheet: Shell HVI 160B Document Date: 11 August 2017 Revision 4

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

Disclaime

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.