



Shell

Cargo Handling Sheet

Neodol 45

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Revision 12

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

Product Details

Trade Name: Neodol 45
IMO Product Name: Alcohols (C13+)
Chemical Family: Alcohols Glycols
Product Code: V2456

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

Physical Properties

Density: 823 kg/m³ (40 °C / 104 °F)
Dynamic Viscosity: Solid (20 °C / 68 °F)
50 mPa.s (35 °C / 95 °F)
14 mPa.s (40 °C / 104 °F)
Vapor Pressure: < 0.05 hPa (25 °C / 77 °F)
Boiling Point: 289 °C / 552 °F
Melting Point: 29 - 36 °C / 84 - 97 °F
Pour Point: 29 °C / 84 °F
Flash Point: 157 °C / 315 °F
Appearance: Waxy solid at 20 °C; white colour; mild 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: Extremely flammable and Static accumulator; See SDS for full list of hazards and precautions.

Transshipment

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.

Marpol Details

Marpol Annex: II
IMO Ship Type: 2

Inland Barge:	Double Hull
IMO Pollution Category:	Y
IBC 16.2.6:	No
IBC 16.2.9:	Yes
Pre-Wash Required:	No pre-wash required when discharged in accordance with CHS
Compatibility Group:	USCG compatibility group 20

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior Loading:	Yes, Product Quality requirement; Max 1000 ppm (0.1%) O ₂ , 99.90% N ₂ Purity, see Notes below
N2 Blanket Required:	Yes, Product Quality requirement; Max 1000 ppm (0.1%) O ₂ , 99.90% N ₂ Purity, see Notes below
Adjacent Space Purge:	No
Loading Temperature Range:	41 – 55 °C / 106 – 131 °F
Transit Temperature Range:	36 – 45 °C / 97– 113 °F
Unloading Temperature Range:	46 – 55 °C / 115 – 131 °F
Maximum Heating Coil Temperature:	100 °C / 212 °F
Maximum Adjacent Temperature:	55 °C / 131 °F

Note 1: If vessel is required to inert tanks, 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 unloading and receiving vessel, at their time, risk, and expense.

Note 3: N₂ Blanket Guidance:

- a. O₂ level in tanks: Max 1000 ppm (0.1%) O₂; See Regional Requirements
- b. Vessel to maintain a constant nitrogen overpressure of 20 millibars or more during the voyage
- c. **DAILY LOG:** During the voyage the vessel shall record the following at least once a day and the record shall be sent to the Shell Charterers/Planners after the completion of unloading.
 1. Tank pressure
 2. O₂ level
 3. Tank Temperature

Regional Requirements

Note 1: Short voyages in Europe: may only require blanketing, however:

- If the short voyage is part of an international voyage, the short voyage must also have the tanks purged.

Note 2: Short Voyages in Japan (3 days or less): WWT not required; Pre-load purging or padding not required.

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 Tanks: Stainless preferred. Highbaked phenolic and modified phenolic coatings may be accepted. Carrier to verify suitability of coating for products

Banned Prior Cargo: Styrene or any other product which can polymerize. Phosphoric acid, Sulphuric acid, and Caustic.

Wall Wash Required: Yes; all conducted with Methanol except PH test, which uses DI water

Coated Tanks: WWT conducted by cargo surveyor.

Stainless Steel Tanks: verification of shipboard WWT may be accepted if below specs are met. (Send WWT Verification to the responsible Shell charterer and present to cargo surveyor and loading master at loading terminal.)

Wall Wash Test:	Specification	Standard
Hydrocarbons	Pass	ASTM D1722
Chlorides	Max 3.0 ppm	IMPCA 002-98
Colour Test	Max 0 Pt/Co	ASTM D1209

Additional WWT for Coated Tanks if Prior Cargo is:

Prior Cargo	Wall Wash Test:	Specification	Standard
Acrylate	PPT	> 30 minutes	ASTM D1363
Oils, Waxes, Veg Oils, Fame	NVM	100 ppm	ASTM D1353
Acids, Alkalies	PH Test	6 – 8	ASTM E70

Link to: [WWT Verification Form](#)

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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