

Shell Chemicals

Cargo Handling Sheet

Alpha Ethoxylate One Mol (Laureth - 1)

Document Date: 18 December 2020

Revision 2

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

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Product Name: Alpha Ethoxylate One Mol (Laureth - 1)

IMO Product Name: Alcohol (C12-C16)poly(1-6)ethoxylates

Chemical Family: C12-14 Alcohol ethoxylate

Product Code: V2549, V2663

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

Physical Properties

Density: 0.8779 g/cm3 @ 15.6 °C/ 60 °F

Kinematic Viscosity: $23.5 - 28.1 \text{ mm}2/\text{s} (20 \,^{\circ}\text{C} / 68 \,^{\circ}\text{F})$

Vapor Pressure: < 0.1 psi @ 37.8 °C/ 100 °F

Boiling Point: 266 - 400 °C / 511 - 752 °F

Melting Point: -6 to 11 °C / 21 - 52 °F

PH: 6.0 - 7.5

Flash Point (closed cup): > 135 °C / > 275 °F

Appearance: Clear to slightly hazy liquid

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: Not classified as a physical hazard or health hazard under GHS criteria, however, classified as Toxic under IBC 2021; See SDS for full list of hazards and precautions.

Transhipments 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

Marpol Annex:

IMO Ship Type: 2

Inland Barge: Double Hull

IMO Pollution Category: Y

IBC 16.2.6: No

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IBC 16.2.9: Yes

Pre-Wash Required: No pre-wash required when discharged in accordance with CHS

USCG compatibility group 20, not compatible with group 12 Compatibility Group:

Isocyanates

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior Loading: No

N2 Blanket Required: Yes, PQ requirement; Max 5% O2, 99.5 % N2 Purity,

see Notes below

Adjacent Space Purge: No

Ambient - 40 °C / ambient - 104 °F Loading Temperature Range:

Ambient - 45 °C / 59 - 113 °F Transit Temperature Range:

20 - 45 °C / 68 - 113 °F Discharge Temperature Range:

Maximum Heating Coil Temperature: 100 °C / 212 °F

Adjacent Maximum Cargo Temperature: 45 °C / 113 °F

Note 1: 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 vessel, at their time, risk, and expense.

Note 2: PQ = Product Quality

Note 3: N2 Blanket Guidance:

- a. O2 level in tanks: 5% O2
- 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 maintain a daily log of the following and the log shall be sent to the Shell Charterers/Planners at the time of discharge.
 - 1. Tank pressure 2. O2 level 3. Tank Temperature

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.

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Stainless Steel or Coated Tank: Stainless Steel or coated: Zinc not allowed.

Note 1: Vessels offered for loading into coated tanks:

- Carrier to verify suitability of coating
- For newly coated tanks, either partially or fully recoated, the tanks must have carried 3 or more cargoes for a total of >90days at >90% full.
- Tank Coating Condition Questionnaire submitted to Charterers for review prior to fixing a coated vessel
- Coated tanks to be in very good condition with minimal blistering or breakdown, < 0.5% total tank area
- All blisters to be scraped to hard coating
- All defects to be noted in Survey Report
- Pipelines and fittings to be stainless steel

Banned Prior Cargo: Styrene and any other product which can polymerise. 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 Chemicals charterer and present to cargo surveyor and loading master at loading terminal.)

Specification Wall Wash Test: Standard Hydrocarbons **ASTM D1722** Pass Chlorides IMPCA 002-98 < 3 ppm Color Test < 10 Pt/Co Max **ASTM D1209**

Additional WWT for Coated Tanks if Prior Cargo is:

Wall Wash Test: **Prior Cargo** Specification Standard **PPT** > 30 minutes Acrylate **ASTM D1363** Oils, Waxes, Veg Oils, Fame NVM 100 ppm **ASTM D1353** Acids, Alkalis PH Test 6.9 - 7.1ASTM E70

Link to: WWT Verification Form

Safety Information and Incident Reporting

Safety Information:

HSSE information can be found in the SDS or e-SDS.

Incident Reporting:

All incidents should be reported in accordance with regulations and charter party requirements.

International Registered Vessels: If an incident occurs call Shell International Trading and Shipping in London on +442079347777.

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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 the responsible regional Shell Chemicals Marine Technical Advisor.



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