

Shell MDS (Malaysia) Sendirian Berhad

Date prepared: 14th APRIL 2021 Supersedes: 18th JUNE 2020

CARGO HANDLING REQUIREMENTS

Shell GTL Waxy Raffinate

PRODUCT DETAILS

Product name: Shell GTL Waxy Raffinate

Alternative Product Name: Paraffin Waxes (Fischer-Tropsch) full range, C15-50

branched and linear

Product Code: 002D6234

CAS Number: 848301-87-1

Emergency telephone number: +60-86 292 222

2. PHYSICAL AND CHEMICAL PROPERTIES

Colour: Colourless Appearance: liquid

Odour: Slight Hydrocarbon Pour Point: Typical + 9 °C/48.2 °F **Initial Boiling Point and range:** > 280 °C/536 °F Flash Point: 200 °C /392 °F **Upper explosion Limit:** Typical 10 %(V) **Lower explosion Limit:** Typical 1 %(V) Solubility in water:

810 kg/m³ (15.0°C/59.0°F) Density: **Relative Density:** 0.81 (15.0°C/59.0°F)

Vapour pressure: <=0.0005 kPa (20.0°C/ 68.0 °F)

Neglible

Auto-ignition temperature: > 320 °C/608 °F **Viscosity, Dynamic:** Data not available

Viscosity, Kinematic: 12.1 mm2/s (40.0°C / 104.0°F)

Partition co-efficient,n-octanol/water Pow: >6

3. TRANSSHIPMENTS

Notes: Transshipments (Ship/Ship & Ship/Barge) usually permitted but operations is dependent on risk assessement (location of operation, vessels used, nature of products etc.). Consult regional MTA for advise and clearance <u>prior</u> to fixing transshipment operation.

4. MARPOL DETAILS

Shipping name: GTL Paraffins

Marpol 73/78 Annex:

Ship Type: Double Hull Oil Tanker

IMO Pollution Category : N/A

Pre Wash: Not applicable, wash/disposal as per Annex I

Kinematic Viscosity: 12.1 mm2/s (40.0°C / 104.0°F)

Solidifying: NO

Notes:

5. CARGO HANDLING CRITERIA

All shore, ship, cargo line and tanks are to be presented (residual free) gas free, dry, ordour free, and rust free, with good gaskets and pressure tested steam coils.

Pre-purging of Vessel's Tanks : YES

Pre-purge Oxygen Percent 3 percent

N2 blanket required: YES

N2 blanket percent :3 percentLoading Temperature range:MAX 75 °CTransit Temperature :52-57 °CDischarge Temperature :52-57 °C

Adjacent Max.cargo Temperature: 75 °C

6. TANK ACCEPTANCE CRITERIA

Stainless Steel or Coated Tanks: Stainless Steel Tanks/Coated Tanks

Wall Wash Required: NO

Wash Notes:

Tank Acceptance Notes: Maintenance of steam coils is to be verified with the ship's

log. If products is to be heated, steam coils are to be confirmed leak free. If products is not heated, steam coils are to be drained, dry, clean, blanked off and steam

source is to be isolated from the tanks.

7. SAFETY INFORMATION AND INCIDENT REPORTING

Safety Information :-

For more information, refer to SDS and to EDS for reportable spill/release quantities whether in water, air or ground.

CASUALTY NOTIFICATION PROCEDURE

IN THE EVENT OF AN INCIDENT AS DESCRIBED BELOW, SHELL CASUALTY MUST BE NOTIFIED WITHIN ONE HOUR OF THE INCIDENT OCCURING:

- · AN INCIDENT WHICH MIGHT OR HAS PUT AT RISK THE LIVES OF PERSONS AND/OR THE SAFETY OF THE VESSEL AND/OR THE ENVIRONMENT AND WHOSE CONSEQUENCES HAVE OR MIGHT INVOLVE OTHER SHELL COMPANIES, THIRD PARTIES, GOVERNMENTS OR THE MEDIA.
- · A LOSS OF PRIMARY CONTAINMENT OF OIL, GAS (LNG/LPG), CHEMICALS, OR BULK CARGO, OWNED BY A SHELL COMPANY OR AT AS SHELL FACILITY, OR FROM A SHIP MANAGED OR CHARTERED BY A SHELL COMPANY.
- · A SIGNIFICANT DELAY TO ANY SHIP WHOSE CHARTER, CARGO OR BERTH INVOLVES A SHELL COMPANY
- · AN INCIDENT OF ALLEGED NON COMPLIANCE WHERE REGULATORS HAVE OR MAY BECOME INVOLVED.
- · A SECURITY INCIDENT INCLUDING A SUSPICIOUS PIRACY APPROACH OR PIRACY ATTACK
- · AN ACTUAL, POTENTIAL OR SUSPECTED IMPACT TO CREW OR VESSEL FROM ANY SERIOUS INFECTIOUS DISESE (INCLUDING BUT NOT LIMITED TO COVID-19)

NOTIFICATION SHOULD BE MADE IN THE FOLLOWING ORDER OF PRIORITY.

- BY TELEPHONE: (+44)-207-934-7777, THE DEDICATED TELEPHONE NUMBER FOR CASUALTIES, (24 HOURS).
- BY EMAIL: casualtyalert@shell.com
- BY TELEX: SHELLCASUALTY LONDON 8814807

THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE MESSAGE:

- · NAME OF THE VESSEL
- · TIME AND DESCRIPTION OF INCIDENT (INCLUDE ESTIMATED EXTENT OF DAMAGE)
- $\,\cdot\,$ GEOGRAPHICAL LOCATION AND DISTANCE FROM NEAREST GROUNDING LINE
- · IS THE VESSEL ABLE TO CONTINUE THE VOYAGE AND WHAT IS THE EXPECTED DURATION OF DELAY (IF ANY)
- · 24 HR TELEPHONE NUMBER OF COMPANY DPA
- · TYPE OF SHELL CHARTER (VOYAGE, TIME, SPACE OR OTHER- IF KNOWN)
- · NAME OF SHELL CONTACT IF KNOWN

IN THE EVENT OF AN OIL/CHEMICAL/ GAS SPILL, THE MESSAGE MUST ALSO INCLUDE:

- · LOCAL TIME, DATE AND LOCATION OF SPILL, INDICATING NAME OF OWNER OF THE INSTALLATION (IF IN PORT) AND WHETHER AT A JETTY/CBM/SBM OR AT SEA.
- · TYPE OF OIL/GAS /CHEMICAL E.G. CRUDE/BLACK/WHITE/LUBES/BITUMEN ETC.
- \cdot Cause if known e.g. overflow hose burst defective shore line hull defect etc.
- · ESTIMATED QUANTITY SPILLED
- · ESTIMATE OF RATE OF SPILL IF CONTINUING
- · WHETHER CLEAN-UP HAS BEEN ATTEMPTED, EITHER BY SHIP OR THIRD PARTY
- · ANY OTHER RELEVANT COMMENTS
- · TIME OF ORIGIN OF EACH REPORT.

IF THE ACCIDENT OCCURS WITHIN PORT THE AGENT MUST ALSO BE COPIED ON ALL MESSAGES SENT TO SHELL CASUALTY.

THE FOREGOING REQUIREMENTS ARE IN ADDITION TO ANY CASUALTY REPORTING PROCEDURE SYSTEM VESSEL'S OWNERS/MANAGERS MAY HAVE, PARTICULARLY WITH RESPECT TO US QI REPORTING REQUIREMENTS.