

# Shell MDS (Malaysia) Sendirian Berhad

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## **CARGO HANDLING REQUIREMENTS**

## **SHELL GTL SARAWAX SX50**

## 1. PRODUCT DETAILS

Product name: SHELL GTL SARAWAX SX50

Alternative Product Name: Paraffin Wax, Highly-refined

Product Code: 002D6148

**CAS No**: 8002-74-2

Emergency telephone number: +60-86 292 222

## 2. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Waxy solid at 20 °C

Colour : white
Odour : odourless

pH: Not applicable

Melting / freezing point:  $52 - 56 \,^{\circ}\text{C} / 126 - 133 \,^{\circ}\text{F}$ 

Boiling point/boiling range : 280 °C / 536 °F

Flash point :  $>= 190 \, ^{\circ}\text{C} \, / >= 374 \, ^{\circ}\text{F}$ Flammability (solid, gas) : Data not available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : Data not available

Relative density :  $0.764 \, (70 \, ^{\circ}\text{C} \, / \, 158 \, ^{\circ}\text{F})$ Density :  $764 \, \text{kg/m3} \, (70 \, ^{\circ}\text{C} \, / \, 158 \, ^{\circ}\text{F})$ 

Partition coefficient: noctanol/water: Pow: > 6(based on information on similar products)

Auto-ignition temperature :  $> 320 \, ^{\circ}\text{C} \, / \, 608 \, ^{\circ}\text{F}$ Decomposition temperature: Data not available

Viscosity, kinematic: 3-4 mm2/s (100 °C / 212 °F)

Explosive properties: Not classified

Oxidizing properties: Data not available

### 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:** Paraffin Wax, Highly-refined

Marpol 73/78 Annex: II

**IMO Ship Type:** IMO 2

**IMO Pollution Category**: Y

**Kinematic Viscosity**: 3-4 mm2/s (100 °C / 212 °F)

**Pre Wash:** NO (refer to notes below)

Pre Wash Notes: From 1st January 2021, a prewash procedure shall

apply to all Persistent Floaters, only when unloaded in the relevant special area (European Atlantic coasts, United Kingdom, Ireland, English Channel, North Sea, Baltic sea, Norwegian Sea)

**Solidifying**: No, if the cargo temperature at the time of

unloading is maintained at least 10 deg C above the melting point of the substance

stated in Section 2.

**Notes:** According to MARPOL this is not a "SOLIDIFYING" type substance, but it does solidfy below congeling point,. Minimum unloading temperature is always to be 11 deg C above the congealing point

## 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.

LAST THREE CARGO RESTRICTION: Immediate prior cargo acceptable products have to be clean, odourless, and non-toxic products meeting FDA food-grade materials/NIOP/FOSFA prior cargo restriction. Next two(2) cargoes must be clean, ordorless and non-toxic products. Unacceptable prior cargoes include those listed in the current NIOP prior listings for last three cargoes. Pesticides, radioactive materials, medical wastes, and hazardous wastes are never acceptable.

**Pre-purging of Vessel's Tanks**: YES

Pre-purge Oxygen Percent 3 percent

N2 blanket required: YES

N2 blanket Oxygen percent 3 percent

**Loading Temperature range**: 65 -100 Deg C

**Transit Temperature**: 60-65 Deg C

**Discharge Temperature**: 65-70 Dec C

Adjacent Max.cargo Temp.

Cargo handling Notes:

Sarawax SX50 has a melting point of about 50°C and shall begin to solidify at temperature of about 53°C. However if exposed to temperatures of above 75°C for a prolonged period of time, SX50 might alter its specifications (especially in this long journey).

SX50 is to be stowed in stainless steel tanks.

#### **Instructions:**

75 Deg C

- a. Use low-pressure steam for heating.
- b. The heating should commence upon the restart of product loading after 2-foot samples are taken. Please ensure that heating coils are covered by Paraffin wax.
- c. Heating should be continuous during the voyage and the SX50 temperature should be kept at min 60 max 65°C
- d. Discharging: 4 days prior to cargo discharge, SX50 temperature shall be slowly increased to 65-70°C.

Temperature increase shall not be more than 2-3°C per 24 hours period.

#### 6. TANK ACCEPTANCE CRITERIA

Stainless Steel or Coated Tanks: Stainless Steel Tanks

Wall Wash Required: NO

Wash Notes:

Tank Acceptance Notes:

Vessel to maintain overpressure and 3% oxygen content in vapour space over product during voyage. Vessel to provide daily log for each separate tank recording temperature, nitrogen over pressure, and product temperature. Vessel to provide copy of the log to charterer at mid-point of the voyage, and give copy of log to receiver at port of discharge. 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. Upon advise from shore, vessel is to start tank heating before loading to prevent product congealing on the ship tank floor and walls. Vessel's plan to preheat to be communicated separately and to be know at time of preloading conference.

#### 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)
- · 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.
- $\cdot$  Type of Oil/Gas /Chemical e.g. crude/black/white/lubes/bitumen etc.
- · 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 CASHALTY

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.