



CARGO HANDLING REQUIREMENTS

PARAFFIN 150/200

1. PRODUCT DETAILS

| | |
|------------------------------------|------------------------------------|
| Product name: | PARAFFIN 150/200 |
| Alternate Product name : | Alkanes C-9-12 branched and linear |
| Product Code : | 002D6184 |
| CAS No : | 1437281-04-3 |
| Emergency telephone number: | +60-86 292 222 |

2. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--|
| Colour : | Colourless |
| Appearance : | Liquid |
| Vapour pressure : | 0.178 kPa (25.0°C / 77.0°F) |
| Initial /Final Boiling point : | 150°C -300°C (302°F -572°F) |
| Melting/Freezing point : | Data not available |
| Solubility in water : | Negligible |
| Density : | 730-770 kg/m ³ (15°C / 59.0°F) |
| Flash Point : | 40 °C / 104 °F |
| Flammable Limits Lower/Upper : | Lower: 0.7; Upper: 6.0 % (v/v) |
| Auto Ignition Temperature : | 212°C / 414°F |
| Kinematic Viscosity: | <=1 mm ² /s (40.0°C -104.0°F) |
| Relative Vapour density : | > 3 (20.0°C -68°F) |
| Partition co-efficient, n-octanol/water : | Log Pow : >6.5 |
| Explosive properties : | In use, may form flammable/explosive vapour-air mixtures |

3. TRANSSHIPMENTS

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

4. MARPOL DETAILS

| | |
|--|----------------------------|
| Proper Shipping name : | Hydrocarbons, Liquid N.O.S |
| Marpol 73/78 Annex : | I |
| Ship Type : | Oil Tanker |
| IMO Pollution Category : | |
| Oil Like : | |
| High Viscosity : | NO |
| Solidifying : | NO |
| Minimum Unloading Temperature : | Ambient |

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 : | Refer Section 7 |
| N2 (Inert Gas) blanket required: | Refer Section 7 |
| Loading Temperature range: | Ambient |
| Transit Temperature : | Ambient |
| Discharge Temperature : | Ambient |
| Max heating coil Temperature : | N/A |
| Adjacent Max.cargo Temperature: | Ambient |
| Cargo handling Notes : | |

6. TANK ACCEPTANCE CRITERIA

Stainless Steel or Coated 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. INERT GAS REQUIREMENTS

The clause shall apply for all Charterers flammable (i.e. flashpoint 60 deg C or below) Annex I and II cargoes unless covered by conflicting higher requirements in the Safety of Life at Sea (SOLAS) convention in which case SOLAS convention shall apply.

Owners guarantee that vessels which are fitted with high capacity inert gas systems (i.e. a system capable of delivering a capacity equivalent to or more of the actual discharge rate of Charterers flammable cargo to maintain positive cargo tank inert atmosphere pressure) shall be required to inert tanks that contain Charterers flammable cargoes after the cargo tank has been loaded, but before commencement of unloading, the timing of which to be in Owners' option, and tank inert condition (i.e. 8% O₂ or less by volume) should be continued to be applied throughout the discharge operation.

Should vessel have a system with less capacity than stated above then Owners will be under no obligation to use such system.

Only nitrogen is acceptable as inert gas under this provision.

In circumstances where the vessel is being required to receive non inert vapour return during discharge then Owner has no obligation to keep the tank in an inert condition as prescribed under this clause.

Charterers undertake to declare, prior to fixing, details of any inhibitor used in the shipment of the cargo(s) and the minimum level of oxygen required in the vapour space of the tank for the inhibitor to be effective. Owner should ensure oxygen level is maintained at or above the minimum required oxygen level for the inhibitor to be effective throughout the voyage and discharge operation. Should the required level of Oxygen exceed 8% then Owners will not be required to inert such cargo

8. 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 OCCURRING:

- 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 DISEASE (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.
- 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 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.