

# Cargo Handling Sheet

Non-Shell Product

Propylene

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Revision 1

*Cargo Handling Sheets are for the use of vessels chartered by Shell Chemicals*

*Information is obtained from supplier's SDS and other reference publications.*

### Product Details

Product Name:	Propylene
Shipping Name:	Propylene
Chemical Family:	Alkene
Product Code:	Non-Shell product
SDS:	Get from loading terminal or charterer

### Physical Properties

Density:	Typical 610 kg/m <sup>3</sup> (0 °C / 32 °F)
Kinematic Viscosity:	0.24 cSt @ 24 °C / 75 °F
Vapor Pressure:	476 kPa @ -7 °C / 19 °F
Boiling Point:	-48 °C / -54 °F
Freezing Point:	-185 °C / -301 °F
Flash Point:	- 108 °C / -162 °F
Appearance:	Colourless

**Note 1:** Physical Properties are for reference only and valid as of date of this revision; see loading terminal for specific properties.

**Note 2:** This product is a static accumulator.

### Transshipment

Prior to arranging transshipment, Charterers must agree to Owner's proposed plan

### Regulatory Details

IMO Ship Type:	2G/2PG
IGC Hazards:	Flammable

## Cargo Handling Requirements

Purge Cargo Tanks Prior Loading:	Condition with product to expel N2
Pre-load Purge Oxygen Content:	< 0.3%
Loading Temperature Range:	See notes
Transit Temperature Range:	As per load
Discharge Temperature Range:	As per load

## Regional Requirements

**Note 1:** Inland Barge EUAF- ADN Type G

**Note 2:** For fully pressurized tanks (18 barg) load ambient. For semi pressurized tanks (0.7 barg) load at -48 °C.

Vessels arriving at dock under nitrogen are reminded of the possibility of super cooling when commencing loading. This is caused by the Propylene liquid, pumped into the vessels tanks, evaporating very quickly in order to reach equilibrium at approximately 5 bars at 0 °C.

Where a ship's tanks are presented under nitrogen condition, it is preferred to commence loading with warm cargo vapour first to a sufficient pressure. Where the facility is unable to provide warm cargo vapour, the loading operation must be commenced at a very slow rate. In either case the ship's cargo tank temperature must not fall below the cryogenic limits.

**Note 3:** Shell Moerdijk does not have the facility to purge with warm Propylene vapours in order to displace nitrogen in the vessel tanks to overcome super cooling. It is thus recommended that vessels arriving at Shell Moerdijk be gassed up with Propylene at a vapour pressure of approximately 5 bars.

## Tank Acceptance Requirements

Dew-point:	< -25 °C / -13 °F
Peroxide Level:	< 5 ppmw
Prior Cargoes:	Consult Shell Chemical Responsible Charterer

## Safety Information and Incident Reporting

### Safety Information:

For more detailed information, refer to the SDS or e-SDS for reportable spill/release quantities whether in the water, air or ground.

### Incident Reporting for vessels on Shell charter.

International Registered Vessels: call Shell International Trading and Shipping in London on +442079347777.

Jones Act Vessels: call the Shell 24 hr. incident number at +17132412532. The USA National response center telephone number is +18004248802.

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