



Shell Melina

Multi-purpose marine diesel engine oil

Shell Melina oils are premium quality marine multi-purpose system oils designed, primarily, for low-speed, crosshead, marine diesel engines operating on residual fuels. They are alkaline oils giving the highest levels of protection in a wide variety of engine and shipboard applications

Applications

- Crankcase systems of low-speed, crosshead, marine diesel engines operating on residual fuels
- Main and auxiliary trunk piston diesel engines burning distillate fuels
- Turbochargers
- Geared transmissions
- Oil-lubricated stern-tubes
- Variable pitch propellers
- Deck machinery
- Other ancillary equipment requiring a SAE 20, 30 or 40 oil

Performance Features

- **Oxidation stability**
High resistance to oil thickening with negligible deposits in piston cooling spaces
- **Excellent dispersancy**
Keeps sump tanks free from sludge and allows contaminants to be removed by filtration or by centrifugal separation
- **Good alkalinity**
Neutralises the strong, highly corrosive, acids contained in the products of combustion which might contaminate the system as a result of cylinder oil draining leaking past piston rod glands, piston rings in trunk piston engines, through cracked pistons, rotary valve seals, etc.
- **Good water shedding properties**
Particularly suitable for crosshead engines which use water cooling systems to control piston crown temperatures.
- **Excellent resistance to corrosion**
Resistant to corrosion by salt water. Rusting in machinery lubricated by Shell Melina Oils

has been unknown, throughout its extensive service experience.

Performance Specifications

API	- CD
US Military	- MIL-L-2104C
Sulzer	- Fully approved for crosshead marine diesel engines
MAN B & W	- Fully approved for crosshead marine diesel engines

Purification

Normal purification equipment and practices are recommended for the removal of contaminants. Equipment should be operated in accordance with Manufacturers' instructions.

For satisfactory centrifugal separation, it is particularly important to:-

- Select the gravity disc size most appropriate to the oil density
- Contain the oil throughput to no more than that recommended for additive type lubricants by the machine manufacturer.
- Maintain an adequate oil separation temperature: the optimum should, wherever possible, be above 80°C, but should not exceed 90°C
- Operate the machine on a regular schedule, preferably daily. Continuous separation is often advisable, depending on the oil condition and size of centrifuge.

Health & Safety

Shell Melina oils are unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

For further guidance on Product Health & Safety refer to the appropriate Shell Product Safety Data Sheet.

Protect the environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Advice

Advice on applications not covered in this leaflet may be obtained from your Shell Representative. For contact details see page ii in the front of this binder.

Typical Physical Characteristics

Shell Melina	30	40
SAE Viscosity Grade (J 300)	30	40
Kinematic Viscosity @ 40°C mm ² /s 100°C mm ² /s (IP 71)	104.0 11.8	139.0 14.4
Viscosity Index (IP 226)	102	102
Density @ 15°C kg/l (IP 365)	0.897	0.900
Flash Point °C (Pensky-Martens Closed Cup) (IP 34)	227	229
Pour Point °C (IP 15)	-18	-9
Load Carrying Capacity FZG Gear Machine A/8.3/90 Failure load stage (IP 334)	>12	>12
TBN-E mgKOH/g (IP 276)	8.0	8.0
Sulphated Ash % wt (IP 163)	1.0	1.0

These characteristics are typical of current production. Whilst future production will conform to Shell's specification variations in these characteristics may occur.