



Shell Alexia 50

Premium cylinder oil

For low-speed diesel engines

Shell Alexia Oil 50 is a premium grade cylinder lubricant for use in all types of low speed crosshead diesel engines burning residual fuels with sulphur contents of up to 3.5% weight. It is ideally suited for the new generation of highly rated, fuel efficient, low-speed marine diesel engines operating with higher pressures, higher temperatures and longer strokes.

It is a blend of highly refined, high viscosity index base oils, and unique additives technology developed by Shell Research.

Applications

- Low-speed marine diesel engines burning heavy fuel with a relatively high sulphur content of between 1.0 to 3.5% weight.
- Cylinder lubrication of slow speed marine diesel engines.

Performance Features

- **Unique additive technology**
Imparts outstanding acid neutralising properties to counter corrosive wear resulting from the use of high sulphur fuels
- **Minimum deposit formation**
On cylinder ports, pistons, piston rings, ring grooves and under piston spaces
- **Low cylinder and piston ring wear**
Cylinder wear rates below 0.05 mm per 1000 hours are commonly experienced
- **Excellent engine cleanliness**
Extended interval between maintenance schedules - Periods between piston overhauls of up to two years are not unusual
- **Storage stability**
Completely stable in storage under all the widely varying conditions encountered aboard ship
- **Sight-glass fluid compatibility**
Compatible with all normal lubricator sight glass fluids
- **Service experience**
Developed over 35 years in close co-operation with ship-owners

Performance Specifications

All manufacturers of slow-speed crosshead diesel engines approve the use of Shell Alexia Oil 50

Oil Feed Rates

Insufficient cylinder oil feed rates can lead to corrosive wear, seized and broken rings and consequent blow-by and scavenge fire risks, and to the formation of excessive and tenacious deposits.

To obtain optimum performance with Shell Alexia Oil 50 it is important to:

- Observe the engine manufacturers' recommended cylinder oil feed rates as the minimum.
- Consider using higher rates, especially when running in new liners and/or rings
- Equally distribute the oil between injection quills
- Ensure the lubricator drive system is well maintained and properly adjusted
- Clean and overhaul lubricator boxes according to engine manufacturers' recommendations

Seal Compatibility

Shell Alexia Oil 50 is compatible with all normal oil seal materials.

Health & Safety

Shell Alexia Oil 50 is 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 Alexia	50
SAE Viscosity Grade (J 300)	50
Kinematic Viscosity @ 40°C mm ² /s 100°C mm ² /s (IP 71)	211.0 19.5
Density @ 15°C kg/l (IP 365)	0.936
Flash Point °C (Pensky-Martens Closed Cup) (IP 34)	210
Pour Point °C (IP 15)	-13
TBN-E mg KOH/g (IP 276)	70
Sulphated Ash % wt (IP 163)	8.50

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