

Shell Alexia LS

Special cylinder oil for low-speed diesel engines



Shell Alexia LS is a special 40BN, SAE 50 cylinder lubricant, for improved piston running conditions in low speed crosshead diesel engines burning low sulphur fuels

Applications

- Cylinders of low-speed crosshead diesel engines burning fuels with sulphur content below 2%wt, where the designer recommends a lower Base Number (BN) oil to reduce the risk of "sudden severe wear" or scuffing.

- 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

Performance Features

- **Reduced piston deposits**
The reduced ash level of Alexia LS helps to avoid excessive piston top land deposits, which can sometimes build up when 70BN oils are used with low sulphur fuel.
- **Good piston ring and port cleanliness**
Alexia LS contains "hidden" detergency, not reflected in the BN of the product. This enables it to keep the ring belt and scavenge air ports clean in spite of the reduced BN.
- **Greater feed rate flexibility**
The control of deposits and lower ash allows Alexia LS to be used over a wider range of feed rates with less danger of excessive deposits, than a 70BN cylinder oil.

Performance Specifications

Alexia LS is approved by Wartsila (Sulzer). An approval trial with MAN B&W is in progress.

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 LS it is important to:

- Observe the engine manufacturers' recommended cylinder oil feed rates as the minimum.

Seal Compatibility

Shell Alexia LS is compatible with all normal oil seal materials.

Advice

Advice on applications not covered in this leaflet may be obtained from your Shell Representative.

Typical Physical Characteristics

Shell Alexia LS	
SAE Viscosity Grade	50
Kinematic Viscosity @ 40°C cSt 100°C cSt (IP 71)	211.0 19.5
Viscosity Index (IP 226)	100
Density @ 15°C kg/l (IP 365)	0.925
Flash Point °C (Pensky-Martens Closed Cup) (IP 34)	210
Pour Point °C (IP 15)	-6
TBN mg KOH/g (IP 276)	40
Sulphated Ash % wt (IP 163)	5.3

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

Health & Safety

Shell Alexia LS 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.