



Shell Alexia 50

Cylinder Lubricant for low-speed crosshead diesel engines

Shell Alexia 50 is a high quality cylinder lubricant designed for use in low speed crosshead diesel engines burning heavy fuel oil.

Shell Alexia 50 has been specially formulated with proven and reliable technology.

Shell Alexia 50 has a BN of 70 and is a SAE50 cylinder oil.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

• Improved engine reliability

Excellent acid neutralising properties which help to prolong the life of components.

Minimal deposits on pistons, piston rings, ring grooves, under piston spaces and in cylinder ports.

Low cylinder and piston ring wear with typical cylinder wear rates below 0.05 mm per 1000 hours due to enhanced boundary lubrication properties.

• Lower maintenance costs

Keeps engines exceptionally clean, minimises maintenance requirements and allows the periods between overhauls to be extended.

• Re-assurance

Completely stable in storage under all the widely varying conditions encountered aboard ship.

Proven ability to keep engines clean and control wear & scuffing.

Compatible with all normal oil seal materials.

Oil feed rates

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

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

- Follow the OEM feedrate recommendations 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.

Main Applications

Shell Alexia 50 is a BN70 cylinder lubricant for low speed marine diesel engines which burn heavy fuel oil. For detailed application advice based on your specific engine type and operating conditions refer to manufacturers' guidelines.

Specifications, Approvals & Recommendations

Approved by key manufacturers of low speed crosshead diesel engines.

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Compatibility & Miscibility

• Mixing of cylinder lubricants

Shell Alexia 50 is fully miscible with all other cylinder lubricants. However, for optimum performance, Shell Alexia 50 should not be used with any other cylinder lubricant.

Typical Physical Characteristics

| Properties | | | Method | Shell Alexia 50 |
|-----------------------|--------|--------------------|------------|-----------------|
| Kinematic Viscosity | @40°C | mm ² /s | ASTM D445 | 225 |
| Kinematic Viscosity | @100°C | mm ² /s | ASTM D445 | 18.5 |
| Viscosity Index (min) | | | ASTM D2270 | 95 |
| Density | @15°C | kg/l | ASTM D4052 | 0.932 |
| Flash Point (PMCC) | | °C minimum | ASTM D93 | 205 |

| Properties | | Method | Shell Alexia 50 |
|---------------|------------|------------|-----------------|
| Pour Point | °C maximum | ASTM D97 | -6 |
| BN | mg/KOH/g | ASTM D2896 | 70 |
| Sulphated Ash | % wt | ASTM D874 | 8.7 |

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

Health, Safety & Environment

- **Health and Safety**

Shell Alexia 50 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

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

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

- **Protect the Environment**

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

Additional Information

- **Advice**

Advice on applications not covered here may be obtained from your Shell representative.