



# Shell Alexia S6

- EXTRA PROTECTION
- HIGH PERFORMANCE

## Cylinder Lubricant for two-stroke low speed diesel engines

Shell Alexia S6 is a cylinder lubricant designed for use in two-stroke low speed diesel engines running under conditions of very high oil stress. It provides additional protection in engines that require a very high performing product and is suitable for use with engines burning residual fuel with Sulphur levels >2.0%. It has been engineered to offer excellent performance for the new, more demanding engines, under challenging operational conditions such "slow" and "flexible" steaming regimes and very high fuel Sulphur levels. Shell Alexia S6 offers additional protection for engines running under more demanding conditions, such as Tier II tuned engines and those retrofitted with turbocharger cutout where additional support from the lubricant is required. It has been especially formulated to deal with all aspects of Oil Stress. Shell Alexia S6 has a BN of 100 and is an SAE50 oil cylinder lubricant.

## DESIGNED TO MEET CHALLENGES

### Performance, Features & Benefits

- **Engine protection**

Shell Alexia S6 offers outstanding acid neutralising properties which help to prolong the life of components.

It utilises the same technology platform as the other Shell Alexia grades but has been designed to offer additional protection for those engines running under more demanding conditions, which result in greater oil stress.

Shell Alexia S6 has superior deposit control and minimises deposit build up on pistons, piston rings, ring grooves, under piston spaces and in cylinder ports.

### Main Applications

- **Two-stroke low speed diesel engines**

Cylinder lubrication of 2-stroke low speed diesel engines running under conditions of high oil stress (for example, engines with very long strokes or fitted with turbocharger cut out) and burning residual fuel oil with Sulphur > 2.0%

### Specifications, Approvals & Recommendations

Shell Alexia S6 is approved for use by major manufacturers of low speed crosshead diesel engines including:

- Wärtsilä TBC
- MAN TBC

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

### Compatibility & Miscibility

- **Mixing of cylinder lubricants**

Shell Alexia S6 is fully miscible with all other cylinder lubricants. However, for optimum performance, Shell Alexia S6 should not be used in conjunction with any other cylinder lubricant.

### Typical Physical Characteristics

Properties			Method	Shell Alexia S6
SAE Viscosity Grade				50
Kinematic Viscosity	@40°C	mm <sup>2</sup> /s	ASTM D445/ IP 71	180
Kinematic Viscosity	@100°C	mm <sup>2</sup> /s	ASTM D445/ IP 71	16.7
Viscosity Index			ASTM D2270/ IP 226	>95
Density	@15°C	kg/l	ASTM D4052/ IP 365	940
Flash Point			ASTM D93/ IP 34	>210
Pour Point			ASTM D97/ IP 15	<-6
BN			ASTM D2896/ IP276	100
Sulphated Ash			ASTM D874/ IP163	9.8

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 S6 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 [www.epc.shell.com](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

- **Cylinder 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 deposits.

Shell Alexia S6 has a BN of 100 and should be used as per the relevant OEM service letters.

To obtain optimum performance with Shell Alexia S6 it is important to:-

Ensure the lubrication system is well maintained and properly adjusted.

Use Shell RLA and Shell AnalexAlert to analyse used oil and seek advice from Shell's technical experts for advice on how to optimise oil feed rate.

- **Advice**

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