



Shell Sirius S4 15W-40

- Triple protection

High Performance High-Speed Diesel Engine Oil

Shell Sirius S4 15W-40 is a superior high performance engine lubricant designed to meet the demanding requirements of a wide range of high speed marine diesel engines operating under various conditions.

Provides triple protection to your marine diesel engines, improving engine and oil durability. Suitable for marine diesel engines burning distillate fuels with a sulphur content of up to 0.5%.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Acid and Corrosion control**

Shell Sirius S4 15W-40 displays excellent control of acids by reducing the accumulation of acids and chemical corrosion of engine bearings. Selected detergent additives neutralize the harmful acids from fuel combustion and prevent corrosion of metal surfaces.

- **Good deposit control**

Offers optimised detergent and dispersant additive technology that helps to prevent oil from thickening, engines from sludge and piston deposits formation to ensure maximum reliability of marine engines.

- **Outstanding wear protection**

The anti-wear additive maintains a protective oil film between pistons, rings and cylinder walls under different operating temperature and pressures. With addition of the soot dispersant additives in our Sirius S4, it keeps the soot particles finely dispersed to help prevent wear. A combination of the anti-wear and soot dispersant additive helps to prolong engine life and efficiency.

Main Applications



- **High speed propulsion engines**

Recommended for offshore vessels and platforms, patrol boats and tugboats.

- **Engine manufacturer acceptance**

Approved for use by many leading OEMs for marine applications such as Caterpillar, Cummins & MTU.

- **Low emission marine diesel engines**

Shell Sirius S4 15W-40 is suitable for most modern low emission marine engines meeting ACEA E7 and API CI-4 requirements. For latest low emissions marine engines fitted with exhaust diesel particulate filters (DPF), we recommend the use of low-emission products, Shell Sirius S4 L 15W-40.

- Shell Sirius S4 15W-40 is suitable for use with biodiesel per the OEM recommended oil drain intervals.

Specifications, Approvals & Recommendations

- ACEA E7, E5, E3
- API CI-4, CH-4, SL
- Caterpillar ECF-1A, ECF-2
- Cummins CES 20078, 20077, 20076, 20075, 20072, 20071
- Global DHD-1
- JASO DH-1
- MTU Category 2

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

Typical Physical Characteristics

| Properties | | | Method | Shell Sirius S4 15W-40 |
|---------------------|--------|--------------------|------------|------------------------|
| SAE Viscosity Grade | | | | 15W-40 |
| Kinematic Viscosity | @40°C | mm ² /s | ASTM D445 | 105.1 |
| Kinematic Viscosity | @100°C | mm ² /s | ASTM D445 | 14.3 |
| Dynamic Viscosity | @-20°C | mPa*s | ASTM D5293 | 6 600 |
| Viscosity Index | | | ASTM D2270 | 139 |
| Density | @15°C | kg/m ³ | ASTM D4052 | 886 |
| Flash Point PMCC | | °C | ASTM D93 | 205 |
| Pour Point | | °C | ASTM D97 | -39 |
| TBN | | mg KOH/g | ASTM D2896 | 10.8 |
| Sulphated Ash | | % | ASTM D874 | 1.44 |

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 Sirius S4 15W-40 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 Safety Data Sheet, which can be obtained from <https://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.