Technical Data Sheet

Shell **Sirius S4 L** *15W-40*

- Low emissions

High Performance High-Speed Diesel Engine Oil

Shell Sirius S4 L 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. "Low-SAPS" additive technology to protect low emission marine diesel engines fitted with exhaust diesel particulate filters (DPF) with maximum sulphated ash content of 1.0% .

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Simplify inventory needs**

  Sirius S4 L 15W-40 is approved by many leading OEMs to simplify inventory needs for fleets with a mixture of engine makers.

- **Emissions system capability**

  Advanced low-ash formulation helps control blocking of or poisoning of exhaust after-treatment devices, helping maintain emission compliance and engine fuel efficiency.

- **Outstanding engine cleanliness**

  The high performance detergent and dispersant additive technology deliver high levels of piston cleanliness ensuring maximum reliability of your marine engines.

- **Reduced engine wear**

  Maintains a protective oil film between pistons, rings and cylinder walls under different operating temperature and pressures to prolong engine life and efficiency.

- **Low emission marine diesel engines**

  Shell Sirius S4 L 15W-40 is recommended for used in low emission requirement engines such as Caterpillar, Cummins and MTU engines. Marine engines that are not fitted with DPF are recommended to use our Shell Sirius S4 15W-40.

Specifications, Approvals & Recommendations

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4, SN
- ACEA E9, E7
- Caterpillar ECF-3, ECF-2
- Cummins CES 20086, 20081
- MTU Category 2.1
- JASO DH-2

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

Main Applications



- **High speed propulsion engines**

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

Typical Physical Characteristics

Properties			Method	Shell Sirius S4 L 15W-40
Kinematic Viscosity	@40°C	mm^2/s	ASTM D445	115
Kinematic Viscosity	@100°C	mm^2/s	ASTM D445	15.3
Viscosity Index			ASTM D2270	139
Density	@15°C	kg/l	ASTM D4052	0.876
Sulphated Ash		% maximum	ASTM D874	1.0

Properties		Method	Shell Sirius S4 L 15W-40
Total Base Number	mg KOH/g	ASTM D2896	10
Flash Point (COC)	°C	ASTM D92	236
Pour Point	°C	ASTM D97	-35

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 L 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.