Technical Data Sheet

Shell **Marine** *40*

- Reliable lubrication

High-Speed Diesel Engine Oil

Shell Marine 40 is a premium quality high performance engine lubricants designed to meet the demanding requirements of a wide range of high speed marine diesel engines operating under all conditions. Suitable for marine diesel engines burning distillate fuels with a sulphur content of up to 0.5%.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Outstanding Piston Cleanliness**

  Free-running piston rings, even under difficult operational conditions, ensuring maximum reliability.

- **Exceptional Engine Cleanliness**

  Ability to retain high levels of soot safely in suspension, even with extended drain intervals.

- **Excellent Oxidation Resistance**

  Unusually good thermal stability and oxidation resistance built in. The lubricant is therefore especially suited for marine diesel engines operating at high piston temperatures, including both naturally aspirated and turbocharged engines.

- **Good Anti-Wear Properties**

  Maintains a protective oil film between pistons and their rings and cylinder walls, under high operating temperatures and pressures.

Main Applications



- **High speed propulsion engines**

  Recommended for fishing boats, dredging, tugboats and ferries.

- **Marine diesel engines**

  For more severe heavy duty operation or application in modern marine engines, we recommend Shell Sirius S4 and Shell Sirius S4 L for low emission modern engines.

- Shell Marine 40 is suitable for use with biodiesel per the OEM recommended oil drain intervals.

Specifications, Approvals & Recommendations

- API CF, CD

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

Typical Physical Characteristics

Properties			Method	Shell Marine 40
SAE Viscosity Grade				40
Kinematic Viscosity	@100°C	mm^2/s	ASTM D445	13.5
Viscosity Index			ASTM D2270	102
Density	@15°C	kg/m^3	ASTM D4052	895
Flash Point (COC)		°C	ASTM D92	250
TBN-E		mg KOH/g	ASTM D2896	10

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 Marine 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.