



Shell Sirius X 40

Super High Performance Diesel Engine Oil

Shell Sirius X is a top quality lubricant, of the Super High Performance Diesel Engine Oil (SHPDO) class. It is designed for the highest output, high-speed diesel engines, burning distillate fuel and is formulated to give better engine protection and longer drain intervals than normal diesel engine oils.

Shell Sirius X is especially suitable for the high power/weight units used in fast vessels and compact generator sets.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Outstanding piston cleanliness**
Free-running piston rings, even under difficult operational conditions, ensuring maximum reliability.
- **Exceptional protection against bore polishing**
Control of blow-by and oil consumption, preserving engine efficiency. SHPDO type oils are preferred by many engine manufacturers to guard against bore polishing.
- **Exceptional engine cleanliness**
Ability to retain high levels of soot safely in suspension, even with extended drain intervals.
- **Oxidation resistance twice that of conventional oils**
Ability to withstand high temperatures for longer, in severe service or with extended drain intervals.
- **High reserve alkalinity**
A TBN-E (total base number) of 17 to neutralise acids and provide corrosion protection until the next drain interval, even with the higher sulphur levels sometimes found in marine distillate fuels.

Main Applications

- High-speed diesel engines operating on distillate fuels.
- N.B. Not suitable for N. American automotive type engines, for which API CF-4 type oils are required.

Specifications, Approvals & Recommendations

- MTU (Type II high performance category)
- CWEC (Cummins Wartsila Engine Company)
- MWM Deutz (high output, high speed, e.g. TBD 620)
- Meets the requirements of Caterpillar 3600 Series API CF

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

Typical Physical Characteristics

Properties			Method	Shell Sirius X 40	
SAE Viscosity Grade				40	
Kinematic Viscosity	@40°C	cSt	ASTM D445	139	
Kinematic Viscosity	@100°C	cSt	ASTM D445	14	
Density	@15°C	kg/l	ASTM D4052	0.890	
Flash Point CC			°C	ASTM D93	230
Pour Point			°C	ASTM D97	-18
TBN-E			mg KOH/g	ASTM D2896	17
Sulphated Ash			% wt	ASTM D874	1.85

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 X 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 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.