**Technical Data Sheet** 



# Shell Super Marine 15W-40

# High Speed Diesel Engine Oil for Marine Vessels

Shell Super Marine Oils are premium quality high performance engine lubricants designed to meet the demanding requirements of a very wide range of high speed marine diesel engines operating under all conditions.

# **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 – for example Coastal Vessels, Fishing trawlers, rescue boats and tug boats; High speed generator engines.

# Specifications, Approvals & Recommendations

- Volvo VDS
- MB-Approval 228.1
- API CF-4, CF
- MAN 271
- For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

# **Typical Physical Characteristics**

Properties			Method	Shell Super Marine 15W-40
SAE Viscosity Grade				15W-40
Kinematic Viscosity	@40ºC	mm²/s	ASTM D445	104
Kinematic Viscosity	@100°C	mm²/s	ASTM D445	14.3
Dynamic Viscosity	@-20°C	mPas	ASTM D5293	6 600
Viscosity Index			ASTM D2270	141
Density	@15ºC	kg/l	ASTM D4052	0.89
Flash Point (COC)		°C	ASTM D92	226
Pour Point		٥C	ASTM D97	-33
Sulphated Ash		%	ASTM D874	1.3
TBN		Mg KOH/g	ASTM D2896	9

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 Super Marine 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.