

# Mobilgard™ 5100

Next-generation cylinder oil designed to help prevent cold corrosion and reduce costs



Energy lives here™

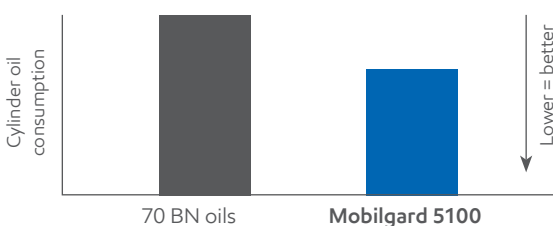
## Product features

Mobilgard™ 5100 next-generation cylinder oil helps optimise the performance of two-stroke marine diesel engines operating on heavy fuel with a sulphur range up to 3.5 per cent. It is engineered to help protect engines susceptible to high levels of cold corrosion. The specially balanced formulation can offer:

- Exceptional acid neutralisation, enabling cold corrosion control in a range of operating conditions
- High performance in newer, more demanding engine types, even in slow steaming operation
- Superb thermal and oxidation stability to address piston and ring groove deposits
- Excellent antiwear properties and anti-scuffing control to help extend liner and ring life
- Outstanding detergency formulations to help provide cleaner pistons and liners

## Cylinder oil consumption

Mobilgard 5100 oil, when used in conjunction with Mobil Serv™ Cylinder Condition Monitoring, can reduce cylinder oil consumption in corrosive engines by up to 30 per cent.



\*Compared to 70 BN oils.

## Potential benefits

Mobilgard 5100 cylinder oil helps to:\*

- 1 Extend cylinder liner life
- 2 Optimise engine performance and cylinder oil feed rates
- 3 Lengthen piston overhaul intervals
- 4 Reduce off-hire time for engine maintenance
- 5 Increase vessel reliability

Mobilgard 5100 oil is the first 100 BN cylinder oil to receive No Objection Letters from the top three engine builders.

Meets OEM requirements	
MAN Diesel & Turbo engine types Mark 8.1 or later	✓
Wärtsilä RTA, RT-flex and W-X engines	✓
Mitsubishi Heavy Industries' UEC diesel engines	✓

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## Optimise feed rates and help save money

Mobilgard™ 5100 oil has been proven to be a more cost-effective solution for engines suffering from high levels of cold corrosion, versus the use of a lower BN oil at a higher feed rate. Compared to 70 BN oils, Mobilgard 5100 oil can help reduce cylinder oil consumption in corrosive engines by up to 45 per cent.

Mobilgard 5100 oil has been proven to protect engines operated at the engine builder's recommended minimum feed rates. Engine builders recommend operators undertake a test (MAN D&T 'sweep' / Wärtsilä 'quick' test) to help identify the optimum BN cylinder oil and feed rate for a specific engine and operating conditions.



## Ongoing monitoring crucial to successful engine operation

Leading engine builders recommend ongoing analysis to monitor the performance of the cylinder oil and engine while in operation. The Mobil Serv™ Cylinder Condition Monitoring programme is designed to help marine operators monitor the overall condition of their engine and lubricant. In combination with a solution of Mobilgard 5100 oil, it can help marine operators to cost-effectively run engines that have the potential to suffer from high levels of cold corrosion.

Mobilgard 5100 cylinder oil, used in conjunction with Mobil Serv Cylinder Condition Monitoring, has helped operators reduce oil consumption by up to

# 45%\*

## Typical properties

Mobilgard 5100	
SAE Grade	50
Specific Gravity at 15°C	0.953
Flash Point, °C, ASTM D 92	244
Pour Point, °C, ASTM D 97	-24
Viscosity, ASTM D 445	
cSt, at 40°C	242
cSt, at 100°C	21.1
Viscosity Index, ASTM D 2270	103
TBN, mg KOH/g, ASTM D 2896	100

\*Based on experience of marine customers. Actual results may vary depending upon the type of equipment used and its maintenance, operating conditions and environment, and any prior lubricant used.