

Mobil SHC™ Aware™ ST Series

Environmentally acceptable* stern tube lubricants for a range of marine applications



Energy lives here™

Product features

Mobil SHC™ Aware™ ST Series oils are a range of optimal-performance, environmentally acceptable* stern tube oils that are biodegradable, minimally toxic and non-bioaccumulative. They can offer:

- Outstanding lubrication and rust/corrosion protection at up to 20 per cent water content
- Excellent load-carrying capabilities
- Good elastomer compatibility
- Compatibility with most typical mineral oils

These oils offer outstanding lubrication and rust/corrosion protection at up to

20%

water content.†

Potential benefits

Mobil SHC Aware ST Series oils help:‡

- 1 Maximise service life of machinery
- 2 Minimise unscheduled downtime and costs
- 3 Lower potential remediation and cleanup costs in case of spills or leakage
- 4 Provide miscibility with most common greases

Mobil SHC Aware product family meets US EPA VGP environmental requirements

Mobil SHC™ Aware™ ST 100 and Mobil SHC™ Aware™ ST 220 oils are Environmentally Acceptable Lubricants (EAL) specially formulated to comply with the 2013 VGP.*

Recommended applications	
Marine stern tube systems and fin stabilisers	✓
Certain controllable pitch propeller (CPP) systems	✓
Applications where biodegradable and minimally toxic stern tube lubricants are required	✓
Equipment operating in environmentally sensitive areas	✓

*Environmentally Acceptable Lubricants (EALs) are defined in the U.S. Environmental Protection Agency's 2013 Vessel General Permit (VGP) as lubricants that are biodegradable, minimally toxic and non-bioaccumulative.

†For emergency running only during short intervals.

‡Compared with conventional mineral products.

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Typical properties

Mobil SHC Aware ST Series		
ISO Viscosity Grade	100	220
Viscosity, ASTM D 445		
cSt @ 40°C	100	220
cSt @ 100°C	19.3	33.3
Viscosity Index, ASTM D 2270	205	200
Density @ 15°C, ASTM D4052, g/ml	0.922	0.932
FZG Gear Test, A/8.3/90, DIN ISO 14635-1, Fail Load Stage	10	11
Rust Characteristics, procedure B, ASTM D 665	Pass	Pass
Pour Point, ASTM D 97, °C	-24	-12
Flash Point (min), ASTM D 92, °C	170	163
Biodegradability, CO2 Evolution, OECD 301 B, %	>60	>60
Acute Algal Toxicity 72h EC50, OECD 201, mg/l	>1000	>1000
Acute Daphnia Toxicity 48h EC50, OECD 202, mg/l	>1000	>1000
Acute Fish Toxicity 96h LC50, OECD 203, mg/l	>1000	>1000
Bioaccumulation, OECD 117, Partition Coefficient, log KOW	<3	<3