

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.

Mobil SHC™ Aware™ ST Series

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 |