

# Mobil SHC™ Aware™ H Series

Environmentally acceptable\* hydraulic lubricants for use in marine applications



Energy lives here™

## Product features

Mobil SHC™ Aware™ H Series high-performance hydraulic oils are a line of Environmentally Acceptable Lubricants (EAL)\* that meet US EPA VGP environmental requirements. They can offer:

- Outstanding load-carrying and antiwear properties, enabling all-around protection
- Protection at a wide operating temperature range
- Excellent low-temperature startup
- Excellent demulsibility, which eases water removal in critical applications
- Improved system cleanliness and deposit control

Provides performance in hydraulic systems operating at temperatures up to

# 100°C

## Potential benefits

Mobil SHC Aware H oils help:†

- 1** Provide outstanding wear protection
- 2** Maximise time between dry docks, helping to reduce operating and maintenance costs
- 3** Lower potential remediation and cleanup costs caused by spills or leakage

## Mobil SHC Aware H oils meet US EPA VGP environmental requirements

Mobil SHC™ Aware™ H 32, 46 and 68 have been developed to meet the United States Environmental Protection Agency's (EPA) 2013 Vessel General Permit (VGP).

OEM approvals	
Denison HF-1, HF-2, HF-3	✓
Eaton ATS-373 (35VQ25) pump test	✓

\*Environmentally acceptable lubricants are defined in the US Environmental Protection Agency's Vessel General Permit (VGP) as lubricants that are biodegradable, minimally toxic and non-bioaccumulative.

†When compared with conventional mineral lubricants.

# Mobil SHC™ Aware™ H Series

## Recommended applications

Mobil SHC™ Aware™ H high-performance hydraulic oils help provide optimal performance under high load and high pressures.

Recommended applications	
Marine controllable pitch propeller systems and fin stabilizers	✓
Deck equipment, marine and mobile equipment operating in environmentally sensitive areas	✓
Systems where readily biodegradable and minimally toxic fluids may be required	✓
Steering gear systems	✓



## Longer equipment and oil life

The series has excellent shear stability for longer oil life and exceptional resistance to viscosity breakdown.

Mobil SHC Aware H oils also have excellent thermal and oxidation stability, which helps reduce maintenance downtime and costs by contributing to system cleanliness and deposit reduction, enabling longer oil life.\*

## Exceptional protection helps lead to longer component life

Mobil SHC Aware H oils' exceptional load-carrying and antiwear properties protect components against wear, which can lead to superior component life. Their shear-stable, high viscosity index also provides optimal protection over a wide temperature range.

Formulated to last —  
dry dock to dry dock.

## Typical properties

Mobil SHC Aware H Series			
ISO Viscosity Grade	32	46	68
Viscosity, ASTM D 445			
cSt @ 40°C	32	46	68
cSt @ 100°C	6.00	8.20	10.37
Viscosity Index, ASTM D 2270	140	140	140
Density @ 15°C, ASTM D4052, g/ml	0.912	0.905	0.915
FZG Gear Test, A/8.3/90 Fail Load Stage, DIN ISO 14635-1, kg/L	11	12	>12
Rust Characteristics, procedure B, ASTM D 665	Pass	Pass	Pass
Pour Point, ASTM D 97, °C	-54	-36	-36
Flash Point (min), ASTM D92, °C	185	185	185
Biodegradability, CO2 Evolution, OECD 301 B, %	>60	>60	>60
Acute Algal Toxicity 72h EC50, OECD 201, mg/l	>1000	>1000	>1000
Acute Daphnia Toxicity 48h EC50, OECD 202, mg/l	>1000	>1000	>1000
Acute Fish Toxicity 96h LC50, OECD 203, mg/l	>1000	>1000	>1000
Bioaccumulation, OECD 117, Partition Coefficient, log KOW	<3	<3	<3

\*Outperforms Mobil DTE 10 Excel™ series oils by up to 100 per cent based on ASTM D2272.