PRODUCT DATA SHEET

Athen Marine Stern EAL Series

The range of environmentally acceptable Stern tube lubricants is based on synthetic esters.

Product Description

Athen Marine Stern EAL Series are high-performance Environmentally Acceptable Lubricants (EAL) formulated with synthetic ester base oils. They are specifically designed for use in marine stern tube systems and related equipment, providing outstanding lubrication even under challenging conditions. These stern tube oils are readily biodegradable and minimally toxic, meeting international requirements for EALs as defined by the US EPA Vessel General Permit.

Features & Benefits

- **Water-Emulsifying Protection**: Formulated to absorb any seawater or freshwater entering the stern tube, forming a stable oil-water emulsion that prevents free water from pooling in the system.
- **Seal and Bearing Compatibility:** Fully compatible with the elastomeric materials used in common Sterntube seal systems (lip seals and face seals)
- **Miscible with Conventional Oils:** Athen Marine EAL Stern Tube oils are compatible with mineral oil-based stern tube lubricants, allowing for easy conversion or top-up in existing systems.
- **Leak Mitigation (ISO VG 220):** The high-viscosity 220 grade is formulated for emergency leak control.

Applications

- Stern Tube Bearings & Seals
- Marine Stabilizers and Thrusters, lip-type seals, and other circulatory oil feed systems
- Particularly recommended to lubricate the sliding rolling bearings of the stern tube to minimize environmental impacts
- High-Load & Emergency Conditions

Typical Characteristics

Athen Marine Stern EAL Series				
Performance meets/exceeds	US EPA VGP 2013 Compliance/ISO 15380 specification for HEES (Hydraulic Environmental Ester Synthetic)			
Typical Characteristics	**SAE Grade**	**68**	**100**	**220**
Test Parameters	**ASTM Method**	**Typical**		
Appearance	Visual	Clear &Bright		
Density @ 15ºC, kg/l	D 1298	0.92	0.925	0.93
Viscosity @ 40ºC, cSt	D 445	68	100	220
Viscosity @ 100ºC, cSt	D 445	Report	Report	Report
Viscosity Index	ASTM D2270	170	170	170
Flash Point, ºC	D 92	220	220	220
Pour Point, ºC	D 97	<-30	<-30	<-24

"Data provided in this PDS is based on standard tests under laboratory conditions and is indicative only. Minor variations that do not affect product performance are expected in normal manufacturing. This product should not be used for any purpose other than those expressly set out in this PDS'