

# ECOMAX ESE 220

Product code: 266101201

## Biodegradable stern tube lubricant

This lubricant is a high performance emulsifying biodegradable oils based on synthetic esters, developed primarily for use in stern tubes and bearings where water ingress may occur.

This product meets the criteria in the US Coastguard Vessel General Permit (VGP) definitions for biodegradable, minimally –toxic and non-bio accumulative published by the US EPA in March 2013.

## Benefits & Advantages

- Very high viscosity index
- Biodegradable & non - toxic
- Excellent wear protection
- Excellent corrosion protection
- Superior level of lubrication even when water ingress occurs
- Miscible with conventional mineral oils
- Meets CEC-L-33-T-93

## Applications

This stern tube oil is intended as drop-in replacements for conventional mineral oils in equipment where there is a risk of accidental spillage or leakage and consequential environmental damage. Next to stern tubes, this product also suited for the application in reduction gear, thruster, spur, couplings and helical and planetary gear units.

## Typical Performance Data

Typical	Test Method	Value
Density @ 20 °C, g/m <sup>3</sup>	ISO 3675	0.93
Viscosity @ 40 °C, cSt	ISO 3104	220
Viscosity @ 100 °C, cSt	ISO 3104	34
Viscosity Index	ASTM D2270	210
Pour point, °C	ASTM D97	-25
Flash point, °C	ASTM D93	230
Steel Corrosion Sea Water	ASTM 665	Pass
TOST test, h	ASTM D-943	>600

All performance data on this Technical Data Sheet are indicative only and can vary during production.

## Acute Toxicity

LC <sub>50</sub> (96 h) > 10000 mg/l	OECD 203
EL <sub>50</sub> (15 d) > 2570 mg/l	(Daphnia) OECD 202 part 2
EC <sub>50</sub> (3 h) > 10000 mg/l	OECD 209