



PRODUCT DATA SHEET

GulfSea BD Gear Oils

A range of environmentally acceptable Marine Biodegradable High Performance EP Gear Oils especially developed for use in sensitive marine environments

Product Description

GulfSea BD Gear Oils are a range of environmentally sensitive high performance, extreme pressure (EP) gear oils formulated from fully saturated esters exhibiting high EP protection, wide operating temperature range, good elastomer compatibility and excellent water separation. Particularly suitable for marine thruster and CPP applications

Features & Benefits

- **GulfSea BD Gear Oil and its components** are biodegradable according to OECD test 301B, are considered minimally toxic according to OECD tests 201/202/203 and as such meets the US EPA VGP2013 definition of an **Environmentally Acceptable Lubricant**.
- **GulfSea BD Gear Oil** has a very wide operating temperature range: -25°C to over +100°C. It is not prone to oxidative thickening, is highly stable ensuring a long operating life.
- **GulfSea BD Gear Oil** is compatible with most common sealing materials, including Nitrile and Viton®. It is miscible with mineral based gear oils but it is good practice to drain systems completely to ensure that full operational benefits are achieved and that the risk of additive incompatibility is avoided.
- **GulfSea BD Gear Oil** does not contain viscosity index (VI) improvers and will not shear down in use resulting in extended operating life.
- **GulfSea BD Gear Oil** has excellent water separation due to its demulsification properties and allows ready water separation in line with OEM requirements – water content should not exceed 1000ppm.
- **GulfSea BD Gear Oil** exhibits high EP protection, exceptional anti-wear properties and good resistance to micropitting. It is an FZG Load Stage 14 lubricant.
- **GulfSea BD Gear Oil** meets the requirements of DIN 51517:3 type CLP lubricating oils and the ISO 12925 CKD specification

Applications

- **GulfSea BD Gear Oil** can be used in marine thrusters and certain CPP designs.
- **GulfSea BD Gear Oil** can be used in applications where oil leakage may encroach on sensitive marine environments.



Marine

PRODUCT DATA SHEET

Typical Properties

GulfSea BD Gear Oils			
Typical Characteristics:	BD 68	BD 100	BD 150
Appearance	Clear Yellow	Clear Yellow	Clear Yellow
Viscosity @40°C (cSt)	68	100	150
Viscosity Index	143	139	138
Density @ 15°C (kg/l)	0.91	0.92	0.93
Pour Point (°C)	<-30	<-30	<-30
Flash Point (COC) °C	>200	>200	>200
FZG Load Stage	14	14	14
Micropitting (FZG FVA 54)	Pass	Pass	Pass
Copper Corrosion (ASTM D130)	Pass	Pass	Pass
Rust (FW & SW) (ASTM D665)	Pass	Pass	Pass

Nov 2017