



Product Data

BioStat ST Range

Environmentally Acceptable Stern Tube Oil

Description

Castrol BioStat ST is an Environmentally Acceptable Lubricant* (EAL) and stern tube oil based on selected synthetic esters and an optimised performance additive system. It provides a very good level of lubrication and corrosion protection, in both fresh and emulsified forms, good oxidation performance and hydrolytic stability.

* Castrol BioStat ST complies with current 2018 US Vessel Incidental Discharge Act (VIDA) criteria for Environmentally Acceptable Lubricants (EALs) as it meets 2013 US Vessel General Permit (VGP) biodegradation, bioaccumulation, and toxicity requirements.

Application

Castrol BioStat ST has been developed primarily for use in stern tubes and combines excellent physical properties that enable both improved lubrication and corrosion protection with an additive system developed to protect stern tube components from wear.

Castrol BioStat ST is intended for use in stern tubes, CPP systems and stabilizers.

Advantages

- Good protection against wear and corrosion.
- Improved oxidation performance, hydrolytic and thermal stability provide extended product life, minimising consumption and waste between dry dockings.
- Emulsifies readily with seawater entering the stern tube to form a stable emulsion, reducing the risk of free water.
- Tested and approved by key leading stern tube and seal manufacturers.
- Compatible and miscible in all proportions with Castrol BioStat.



Castrol's Bio Range of Lubricants are carbon neutral in accordance with BSI PAS2060 since 2021. Carbon neutral achievement of 2025 sales for newly introduced products to be demonstrated in 2026. See www.castrol.com/cneutral for more information.

Typical Characteristics

Name	Method	Units	BioStat ST 100	BioStat ST 150
ISO Viscosity Grade	ISO 3448	-	100	150
Density @ 15°C / 59°F	ISO 12185, ASTM D4052	kg/m ³	925	928
Kinematic Viscosity @ 40°C / 104°F	ISO 3104, ASTM D445	mm ² /s	99	147
Kinematic Viscosity @ 100°C / 212°F	ISO 3104, ASTM D445	mm ² /s	17.0	22.7
Viscosity Index	ISO 2909, ASTM D2270	-	188	184
Pour Point	ASTM D5950	°C (°F)	-33 (-27)	-33 (-27)
Flash Point - open cup method	ISO 2592, ASTM D92	°C (°F)	>230 (>446)	>230 (>446)
Rust test - synthetic seawater (24 hours)	ISO 7120, ASTM D665B	rating	Pass	Pass
Copper corrosion (3 hours @ 100°C / 212°F)	ISO 2160, ASTM D130	rating	1b	1b
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1, ASTM D5182	Failure Load Stage	12	12

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

Additional Information

To ensure that performance and environmental properties of BioStat ST are maintained, it is recommended to drain and flush the system thoroughly when changing fluids, but should follow OEM guidelines.

Seal compatibility with BioStat ST should be confirmed by the manufacturer prior to changeover.

Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

BioStat ST Range

Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol Marine, Technology Centre, Whitchurch Hill, Pangbourne, Reading RG8 7QR, United Kingdom

www.castrol.com/marine