

PRODUCT &

TECHNICAL DATA

CASTROL AERO HF585B Mineral hydraulic fluid

DESCRIPTION

Aero HF585B is a petroleum based aircraft hydraulic fluid which is dyed red. It is produced from low viscosity highly-refined mineral

basestock, shear-stable viscosity index improver, antioxidants, corrosion inhibitors and antiwear additives.

APPLICATIONS

Aero HF585B is subjected to ultra fine filtration prior to packaging in a clean room facility, thereby guaranteeing a very high degree of fluid cleanliness in line with specification requirements.

The oil is supplied in a 5 litre superclean can which is compatible with the Rigbridger fluid replenishing dispenser, the use of which will guarantee delivery of oil to the superclean standard.

FEATURES/BENEFITS

- Good viscosity characteristics over a wide temperature range.
- Excellent low temperature fluidity.
- Superclean product for use in fine tolerance control gear.
- Good elastomer compatibility & Good compatibility with metals.
- All year worldwide use.
- Good cold start up.

APPROVALS STATUS

Aero HF585B is fully approved to the British Ministry of Defence specification DEF STAN 91-48/2, Joint Service Designation OM-15

Aero HF585B is a standardised alternative to the American specification MIL-H-5606E through the NATO number H-515.

CARE AND HANDLING

Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

Avoid contact of spilled material and runoff with soil and surface waterways. Wash thoroughly after handling.

PACKAGING AND STORAGE

Ideally Aero HF585B should be stored indoors but outdoor storage of sealed containers is acceptable provided that some form of primary protection from the elements is used.

Under these storage conditions, Aero HF585B has a guaranteed shelf life of two years, after which it is recommended that samples be taken annually to ensure that the product continues to comply with the relevant specification.

COMPATIBILITY

Aero HF585B is fully compatible with other hydraulic fluids approved to DEF /STAN 91-48/2, MIL-H-5606E, DEF STAN 80-142/1, MIL-H-6083E, MIL-H-83282C and MIL-H-46170B. Mixing with other fluid types such as synthetic gas turbine lubricants and phosphate ester based products should be avoided since this could have adverse effects on the properties of Aero HF585B in terms of Seal compatibility and Coking propensity.

- With paints

Aero HF585B is compatible with good quality epoxy-resin based paints.

- With metals

Aero HF585B is completely compatible with all metals and other constructional materials normally used in hydraulic systems.

- With seals

As part of the approval to DEF STAN 91-48/1 it is necessary that Castrol Aero HF585B has specific rubber swell characteristics. As such, Aero HF585B is compatible with seals and hoses, etc. normally used with mineral based products.

The following rubber compounds have been found to be particularly suitable:

Nitrile
Polyurethane
Polyacrylic
Viton (Fluorocarbon)
Fluorosilicone



Marine

PRODUCT & TECHNICAL DATA

TECHNICAL DATA

TYPICAL CHARACTERISTICS	UNIT	TEST METHOD	VALUE
Aero HF585B			
ISO Grade			15
Relative Density @ 15.6°C	g/ml	ASTM D4052	0.865
Kinematic Viscosity @ 100°C	cSt	ASTM D445	5.4
@ 40°C	cSt	ASTM D445	14
@ -40°C	cSt	ASTM D445	400
@ -54°C	cSt	ASTM D445	2200
Viscosity Index	-	ASTM D2270	>350
Flash Point, PMC	°C	ASTM D93	100
Pour Point	°C	ASTM D97	<-70
Co-efficient of cubical expansion,	°C ⁻¹	-	8.65 x 10 ⁻⁴
Total Acid Number	mg KOH/g	ASTM D664	0.15
Adiabatic Tangent Bulk Modulus	lb/in ² x 10 ⁵		
@ 180°C			0.90
@ 100°C			1.55
@ 40°C			2.25
Solid Particle Contamination	Particles/100ml	DEF STAN 05-46	
Micron in size range 5 – 15			3000
15 – 25			150
25 – 50			40
50 – 100			4
100 – 150			Nil

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

GENERAL ADVICE

Further information on all Castrol Marine lubricants is available from any Castrol Marine office or from:

Castrol Marine www.castrolmarine.com
 Technology Centre
 Whitchurch Hill
 Pangbourne
 Reading RG8 7QR
 United Kingdom

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. Material 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 and the Castrol logo are the trade marks of Castrol Limited, used under licence.

© 2009 BP Marine Limited. All rights reserved.