



## Product Data

# AERO 40

Issue Number 2  
21/06/2004

### *Landing Gear Shock Strut Fluid*

#### DESCRIPTION

Castrol Aero 40 is a high quality, mineral based MIL-H-5606 hydraulic fluid containing a highly shear stable viscosity index improver, an anti-oxidant, anti-wear agents, and an approved EP additive which reduce martensitic streaking of landing gear outer cylinders and galling of shock strut upper bearings. Castrol Aero 40 is undyed, straw coloured to meet Boeing Specification BMS 3-32, Type II

#### APPLICATION

Castrol Aero 40 is designed for use in landing gear shock struts. Castrol Aero 40 is compatible with approved MIL-PRF-6083 and other MIL-PRF-5606 qualified hydraulic fluids. It is not completely compatible with synthetic gas turbine lubricants nor with phosphate-ester hydraulic fluids. It is compatible with other petroleum-based and synthesised hydrocarbon lubricants but contamination should be avoided in order to maintain the unique properties of Castrol Aero 40. It is compatible with seals, hoses and paints normally used in shock struts and dispensing equipment connected with this application. While certain grades of the above materials are fully compatible with Castrol Aero 40, it is advisable to confirm acceptability of use with either the material manufacturer or Castrol.

#### FEATURES

- ◆ Approved EP additive

#### BENEFITS

- ◆ Reduces martensitic streaking of landing gear outer cylinders and galling of shock strut upper bearings.



## Product Data

# AERO 40

### TYPICAL PHYSICAL CHARACTERISTICS

DESCRIPTION	RESULT
Relative density @ 16°C	0.880
Pounds per Gallon @ 16°C (60°F)	7.332
Kinematic Viscosity, cSt @ 100°C	4.71
@ 40°C	13
@ -40°C	510
@ -54°C	2670
Viscosity Index	344
Flash Point, °C (°F)	108 (225)
Fire Point, °C (°F)	116 (240)
Pour Point, °C (°F)	-57 (-70)
Copper Strip Corrosion, 72 hrs @ 121°C (250°F)	1a
Four-Ball Wear-Test, AWSD, mm 1 hr @ 75°C	0.43
Falex Wear Characteristics, 500 lbf, Reference Load	Pass

### APPROVAL STATUS

Castrol Aero 40 is formulated and fully approved to Boeing BMS 3-32 Type II. Boeing Service Letters 707-SL-12-2; 727-SL-12-2; 737-SL-12-2; and 757-SL-27-15-B, which instruct the addition of an EP additive to either the standard or corrosion inhibited mineral based hydraulic fluid for use in their landing gear shock struts.

All reasonable care has been taken to ensure that the information contained in this publication is accurate as at the date of printing. It should be noted however that the information above may be affected by changes occurring subsequent to the date of printing in the blend formulation or methods of application of any of the products referred to or in the requirements of any specification approval relating to any such products.