

Castrol Brayco Micronic 882 NASA

Hydraulic Fluid, Fire Resistant Synthetic Hydrocarbon Base

Description

Castrol Brayco® Micronic 882 NASA is a red colored synthetic hydrocarbon hydraulic fluid ISO viscosity Grade 15 for aircraft, ordnance, and industrial use. It contains no VI improvers and, unlike conventional hydraulic fluids, is not subject to polymer breakdown under high shear conditions. It can be used as a replacement and make-up oil for MIL-PRF-5606, and it is also compatible with MIL-PRF-6083 in all proportions. Castrol Brayco® Micronic 882 NASA has a high flash and fire point, exceptionally high auto ignition point, and low flame propagation. Its properties also include controlled rubber swell for long seal life, low foaming, excellent anti-wear, and good corrosion and oxidation stability.

Castrol Brayco® Micronic 882 NASA meets additional quality control test requirements, as well as special packaging and sampling requirements.

Application

Castrol Brayco® Micronic 882 NASA is primarily designed as a fire resistant hydraulic fluid for aircraft and missile use, but also has many industrial applications where fire and fluid toxicity are a hazard. Castrol Brayco® Micronic 882 NASA is a direct replacement for MIL-PRF-5606.

TEST		MIL-PRF-83282D	
METHOD	DESCRIPTION	REQUIREMENTS	RESULT
D 1298	API Gravity, degrees		35
Table 3	Specific Gravity @ 16/16ºC (60/60ºF)	Report	0.85
Table 8	Pounds per Gallon @ 16ºC (60ºF)		7.08
D 1298	Specific Gravity Variance	0.008 Maximum	0.007
	Kinematic Viscosity, cSt		
	@ 205°C (400°F)	1.0 Minimum	1.1
D 445	@ 100°C (212°F)	3.45 Minimum	3.56
	@ 40ºC (104ºF)	14.0 Minimum	14.5
	@ -40°C (-40°F)	2200 Maximum	2120
D 97	Pour Point, ºC (ºF)	-55 (-67) Maximum	-55 (-67)
D 92	Flash Point, COC, ºC (ºF)	205 (401) Minimum	224 (435)
D 92	Fire Point, COC, ºC (ºF)	245 (473) Minimum	260 (500)
D 664	Neutralization Number, mgKOH/g	0.10 Maximum	0.04

Typical Characteristics

TEST		MIL-PRF-83282D	
METHOD	DESCRIPTION	REQUIREMENTS	RESULT
FTM 350	Evaporation Loss, % wt		
	6.5 hrs @ 205ºC (400ºF)	20.0 Maximum	7
FTM 3458	Low Temperature Stability	No gelling, clouding, crystallization,	
1 110 0400	72 hrs @ -40ºC (-40ºF)	solidification, or separation	Pass
D 892	Foam, Sequence I		
	Tendency, ml	65 maximum	40
	Stability, ml	0	0
D 1744	Water by KFR, ppm	100 Maximum	20
D 5185	Barium Content, ppm	10 Maximum	0
	Lubricity, AWSD, mm		
D 4172	@ 1 kg load	0.21 Maximum	0.11
	@ 10 kg load	0.30 Maximum	0.22
	@ 40 kg load	0.65 Maximum	0.46
	Solid Particle Contamination per 100 ml		
FTM 3009	Autocount		
	5 - 15 Microns		
	15 - 25 Microns	10,000 Maximum	2700
	25- 50 Microns	1,000 Maximum	160
	50- 100 Microns	150 Maximum	30
	100 + Microns	20 Maximum	4
		5 Maximum	0
D4898 (spec) FTM	Gravimetric Residue, mg per 100 ml	0.3 Maximum	0.1
3009 (spec)	Filtering Time, minutes	15 Maximum	9

Additional Information

Temperature Range -40°C to 205°C (-40°F to 401°F)

Packaging

Castrol Brayco® Micronic 882 NASA is specially filtered to micronic specifications. It is available in 55 gallon drums.

Specification

Castrol Brayco® Micronic 882 NASA meets all requirements and is qualified under military specification MIL-PRF-83282D, Amendment 1.

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