



## Brayco Micronic 883

Specialized Synthetic Hydraulic Fluid

### Description

Castrol Brayco™ Micronic 883 is a rust-inhibited fire resistant synthetic ISO viscosity Grade 15 hydraulic fluid for aircraft, ordnance and industrial use. It contains no viscosity index improvers and therefore, unlike conventional hydraulic fluids, it is not subject to polymeric breakdown. This product is compatible with MIL-H-5606J and MIL PRF- 6083F in all proportions.

### Application

Brayco Micronic 883 is primarily designed as a fire resistant hydraulic fluid with superior corrosion resistance. MIL-PRF-46170E is intended for use as a direct replacement for MIL-PRF-6083.

Brayco Micronic 883 meets and is qualified under military specification MIL-PRF-46170E, Type I, Amendment 2.

### Typical Characteristics

Name	Method	Units	BM 883
Specific Gravity @ 15.6°C	VN-TM-005 (ASTM D-287)	-	0.85
Pounds per Gallon	Table 8 (VN-TM-005)	-	7.08
Kinematic Viscosity @ 204°C / 400°F	ISO 3104 / ASTM D 445	mm <sup>2</sup> /s	1.15
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D 445	mm <sup>2</sup> /s	3.7
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D 445	mm <sup>2</sup> /s	15.6
Kinematic Viscosity @ -40°C / -40°F	ISO 3104 / ASTM D 445	mm <sup>2</sup> /s	2450
Kinematic Viscosity @ -54°C / 65°F	ISO 3104 / ASTM D 445	mm <sup>2</sup> /s	14650
Viscosity Index	ISO 2909 / ASTM D2270	-	126
Flash Point, COC	ISO 2592 / ASTM D92	°C/°F	226/440
Fire Point, COC	ISO 2592 / ASTM D92	°C/°F	252/485
Sediment, Trace	ASTM D2273	% vol	0.001
Pour Point	ISO 2592 / ASTM D92	°C/°F	-60/-75
Water Content	ISO 6296 / ASTM D1744	%	0.02
Acid Number	ISO 6619 / ASTM D664	mg KOH/g	0.04
Autoignition Temperature	ASTM E659	°C/°F	380/716

Name	Method	Units	BM 883
Low Temperature Stability @ -40°C/-40°F for 72 hours	FTM 3458	-	Pass
Rust Prevention (polished/sandblasted panels)	ASTM D1748	-	Pass
Rubber Swell, "L" 168 hrs @ 70 Deg C	ASTM D4289	%	17
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0
Foam Sequence II - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0
Foam Sequence III - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0
Four Ball Wear, 1200 rpm, 1hr, 75°C @10 kgf @40 kgf	ASTM D 4172	mm Scar	0.25 0.45
Particle Count automatic, 5-25 micron	VN-TM-013	Per 100ml	4000
Particle Count automatic, 25-50 micron	VN-TM-013	Per 100ml	36
Particle Count automatic, 50-100 micron	VN-TM-013	Per 100ml	4
Particle Count automatic, >100 micron	VN-TM-013	Per 100ml	1
Oxidation and Corrosion Stability 168 hrs, 121°C (250°F), weight change Copper Magnesium Aluminium Steel Viscosity Change Change in acid number	FTM 3009	mg/cm <sup>2</sup>    % mgKOH/g	-0.1 0 0 0 2.5 0.05
Bulk Modulus, Isothermal Secant. 0 to 10,000 psi @ 37.8°C (100°F), 2000 4000 6000 8000 10000	-	minutes	206,000 219,000 234,000 240,000 262,000

Subject to usual manufacturing tolerances.

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