



## Brayco 589

Corrosion Preventive Oil

### Description

Castrol Brayco™ 589 is intended for preservation of turboprop and turbojet engines. This corrosion preventative oil is capable of limited use, not to exceed 25 hours, as an aircraft engine lubricant, and can be used for both preservation and final acceptance runs of aircraft engines requiring MIL-PRF-7808 oils.

### Application

Brayco 589 is intended for preservation of turboprop and turbojet engines. This corrosion preventative oil is capable of limited use, not to exceed 25 hours, as an aircraft engine lubricant, and can be used for both preservation and final acceptance runs of aircraft engines requiring MIL-PRF-7808 oils. Since Brayco 589 is a synthetic ester based fluid it may adversely affect certain paints and elastomers. Serious deterioration of rubber parts, coatings, paint, and other organic materials may result from use of this product in systems designed for use with petroleum based fluids. Customers should determine the compatibility of existing components and make any changes as required to accompany use of this fluid.

### Additional Information

#### Temperature Range

The recommended operating temperature range for MIL-PRF-7808 type oils are from  $-54^{\circ}\text{C}$  to  $149^{\circ}\text{C}$  ( $-65^{\circ}\text{F}$  to  $300^{\circ}\text{F}$ ).

#### Specifications

Brayco 589 meets all the requirements of, and is qualified to MIL-PRF-8188D. This fluid is identified by NATO Code: C-638.

#### Shelf Life

Brayco 589 has a maximum recommended shelf life of 6 years from date of manufacture. This shelf life assumes that the product is stored in its original unopened packaging in ambient temperature conditions.

## Typical Characteristics

Name	Method	Units	MIL-PRF-8188D specification	Brayco 589
API Gravity @ 15°C / 59°F	ASTM D287	°API	-	15.4
Specific Gravity @ 15°C / 59°F	ISO 3675 / ASTM D1298	-	-	0.965
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	-	801
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	3.25 min.	3.32
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	11.5 min.	14
Kinematic Viscosity @ -51°C / -60°F after 35 minutes	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	17,000 max.	11,400
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	210 / 410 min.	226 / 440
Pour Point	ISO 3016 / ASTM D97	°C/°F	-60 / -75 max.	-63 / -80
Acid Number	ISO 6619 / ASTM D664	mgKOH/g	0.5 max.	0.11
<b>Corrosion &amp; Oxidation Stability - 48 hrs @ 200°C / 392°F:</b>				
Silver weight change	ASTM D4636-09	% wt	-0.2	-0.02
Aluminium weight change		% wt	-0.2	0.00
Magnesium weight change		% wt	-0.4	0.00
Steel weight change		% wt	-0.2	0.00
Bronze weight change		% wt	-0.4	-0.04
Titanium weigh change		% wt	-0.2	-0.05
Change in Viscosity		% change	-5 to 25	5-10
Elastomer Compatibility - with NBR-H		FTM 3604	% Vol Change	12 to 35
Evaporation Loss (6.5 hrs @ 205°C / 401°F)	ASTM D972	% wt	30 max.	15
Compatibility	MIL-PRF-8188D spec 4.4.4	Pass	Pass	Pass
Rust Protection - Humidity Cabinet test	ASTM D1748-10 / FTM 5329	Pass	Pass	Pass
Workmanship	MIL-PRF-8188D spec 3.6	Pass	Pass	Pass
Foaming - tendency / stability	FTM 3213	ml / sec	100 / 60 max.	Pass
Lead Corrosion	FTM 5321	g/m <sup>2</sup>	40 max.	1.2

Subject to usual manufacturing tolerances.

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