



## Braycote 806

Grease, Aircraft and Instrument

### Description

Castrol Braycote™ 806 is a smooth, buttery, translucent white NLGI #2 grease based on a perfluoroether base oil. It is thermally stable, nonflammable, and chemically inert to commonly used fuels, solvents and oxidizers. Castrol Fluoroclean™ X100 or Castrol Fluoroclean™ HE can be used to remove this lubricant. Refer to the data sheets for information regarding these products.

### Application

Braycote 806 is designed for static and dynamic lubrication of taper plug valves, gaskets and bearings in fuel systems of aircraft and ground support equipment. It is also suitable for use in the presence of oxygen (LOX/GOX) as a lubricant for valves, threads, and bearings in aerospace vehicles and supporting equipment. Perfluorinated greases, such as Braycote 806, exhibit excellent shelf lives due to their inertness.

Braycote 806 meets the requirements of and is qualified under MIL-PRF-27617F, Type III.

Temperature Range:

-30°C to above 204°C (-22°F to above 400°F).

## Typical Characteristics

Name	Method	Units	Braycote 806
Unworked Penetration	ASTM D217 / IP 50	0.1 mm	280
Worked Penetration (60 strokes @ 25°C / 77°F)	ISO 2137 / ASTM D217	0.1 mm	280
Copper Corrosion (24 hrs, 100°C / 212°F)	ASTM D4048	Rating	1b
Evaporation Loss (22hrs @ 204°C / 400°F)	ASTM D2595	% wt	1.6
Oil Separation (30 hrs @ 204°C / 400°F)	ASTM D6184 / FTM 321.2	% wt	8.98
Resistance to Wash-out by Fuel	FTM 5414	Solubility in fuel (%wt) / resistance to wash-out (Pass)	6.5/Pass
Resistance to Wash-out by Distilled Water	FTM 5415	Pass	Pass
Resistance to Wash-out by Distilled Water / Ethanol	FTM 5415	Pass	Pass
Oxidation Stability - Rotating Pressure Vessel test	ASTM D942 / DIN 51808	Pass	Pass
LOX Impact Sensitivity (1100mm, 20drops)	-	Pass	Pass
High Temperature Bearing Life test	ASTM D3336	hrs	>500
Storage Stability (8 months) - unworked penetration before test	FTM 3467	Pass	Pass
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ISO 51350 / ASTM D2266	mm	0.55
Specific Gravity @ 20°C / 68°F	ISO 3675 / ASTM D1298	-	1.94
Base Oil Viscosity @ 99°C / 210°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	11.6
Base Oil Viscosity @ 38°C / 100°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	97
Base Oil Viscosity @ 20°C / 68°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	490
Viscosity Index	ISO 2909 / ASTM D2270	-	117
Pour Point	ISO 3016 / ASTM D97	°C/°F	-30 / -22
Knudsen Vapour Pressure	-	Torr	<9 x 10 <sup>-7</sup>
Knudsen Vapour Pressure	-	Torr	<9 x 10 <sup>-4</sup>

## Additional Information

### Compatibility

Braycote 806 is compatible with all commonly utilized metals, plastics and elastomers. It may be adversely affected by Lewis Acids catalysts, such as aluminum chloride, at elevated temperatures. Newly exposed rubbing surfaces of aluminum, magnesium or titanium alloys under certain conditions may react with Braycote 806. Such systems should be thoroughly evaluated. Surfaces must be well cleaned of organic rust inhibitors prior to grease application to ensure proper lubrication.

### Packaging

Braycote 806 is available in 2 ounce (AVDP) disposable plastic syringes, 24/8 oz tube cases and 1 pound plastic containers.

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