



Braycote 804

Grease, Aircraft and Instrument

Description

Castrol Braycote™ 804 is a smooth, buttery, translucent white NLGI #1 grease, based on a perfluoropolyether base oil. It is thermally stable, nonflammable, chemically inert to commonly used fuels, solvents, corrosive chemicals 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 804 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) and other highly oxidative materials as a lubricant for valves, threads, and bearings in aerospace vehicles and supporting equipment. Perfluorinated greases, in general, exhibit excellent shelf lives due to their intrinsic inertness.

Braycote 804 meets the requirements of and is qualified to MIL-PRF-27617F, Type I.

Typical Characteristics

Name	Method	Units	Braycote 804
Unworked Penetration	ASTM D217 / IP 50	0.1 mm	322
Worked Penetration (60 strokes @ 25°C / 77°F)	ISO 2137 / ASTM D217	0.1 mm	323
Copper Corrosion (24 hrs, 100°C / 212°F)	ASTM D4048	Rating	1b
Evaporation Loss (22hrs @ 149°C / 300°F)	ASTM D2595	% wt	10
Resistance to Wash-out by Fuel	FTM 5414	Solubility in fuel (%wt) / resistance to wash-out (Pass)	0/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
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ISO 51350 / ASTM D2266	mm	0.28
Knudsen Vapour Pressure @ 28°C / 68°F	-	Torr	1 x 10 ⁻⁵
Knudsen Vapour Pressure @ 100°C / 212°F	-	Torr	1 x 10 ⁻³
Base Oil Viscosity @ 200°C / 68°F	ISO 3104 / ASTM D445	mm ² /s	55
Base Oil Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm ² /s	24
Viscosity Index	ISO 2909 / ASTM D2270	-	65
Pour Point	ISO 3016 / ASTM D97	°C/°F	-45 / -49

Additional Information

Temperature Range

-54°C to 149°C (-65°F to 300°F).

Compatibility

Braycote 804 is compatible with all commonly used plastic, elastomer and metallic materials of construction. It may be adversely affected by Lewis Acids such as aluminum chloride, at elevated temperatures. Rubbing surfaces of aluminum, magnesium or titanium alloys may react with Braycote 804 under certain conditions. Such systems should be thoroughly evaluated. Surfaces must be well cleaned of organic rust inhibitors prior to grease application to insure proper lubrication.

Packaging

Braycote 804 is available in 2 ounce (AVDP) disposable plastic syringes, 1 pound jars, 30 cc fuel kits and 35 pound pails.

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