Product Data

Castrol Braycote 3214

Multipurpose High-temperature Full-synthetic Aircraft Grease

Description

Castrol Braycote™ 3214 is a multi-purpose high-temperature full synthetic grease, which is approved and qualified to MIL-PRF-32014. This product contains a lithium soap thickening agent formulated with a medium viscosity synthetic base oil. Special additives in combination with these key ingredients provide superior wear protection, high load carrying capacity, improved resistance to water and salt water wash out, corrosion inhibition, improved mobility at low temperatures and outstanding stability at high temperature. Castrol Braycote 3214 is recommended for use in aircraft applications with adverse conditions such as high temperature, high humidity and/or high speeds.

Application

Castrol Braycote 3214 was designed for use in aircraft applications requiring a water-resistant, high-speed, high load carrying capacity grease suitable for use in challenging conditions. This product is intended for use in a variety of aircraft applications including landing gear assemblies and bearings, flight controls, flap/slat systems and gear applications where water resistance and corrosion protection are required. Castrol Braycote 3214, like any other lithium thickened grease, is incompatible with clay and bentonite-based greases and should not be used for relubrication of existing components without confirmation of suitability for use from the component manufacturer and/or aircraft OEM.
Temperature range: -65°F to a maximum of 347°F (-54°C to a maximum of 175°C).

Typical Characteristics

Name	Method	Units	Baycote 3214
Worked Penetration, 60 strokes	ASTM D217	0.1mm	307
Dirt Particles per cc of grease, 25 - 125 microns	FTM 3005.4	-	63
Dirt Particles per cc of grease, >125 microns	FTM 3005.4	-	None
Low Temperature Torque, @-54°C / -65°F, Starting	ASTM D1478	gm/cm	10150
Low Temperature Torque, @-54°C / -65°F, Running 1hr	ASTM D1478	gm/cm	1600
Dropping Point	ASTM D2265	°C	260
Optimol SRV at 50°C	Spec 4.5.5	N	> 1500
Optimol SRV at 80°C	Spec 4.5.5	N	> 1500
Fretting Wear	ASTM D4170	mg	32
Anti-friction Bearing Performance, 121°C/250°F	ASTM D3336	Hours	Pass
Oil Separation at 177ºC / 350ºF	ASTM D1742	%	5
Oxidation Stability, Bomb Oxidation Pressure Drop at 500 hrs	ASTM D942	psi	3.5
Corrosion prevention, Distilled Water	ASTM D1743	Pass / Fail	Pass
Water Resistance	ASTM D1264	%	2.7
Evaporation, Weight Loss	ASTM D2595	%	0.3
Density at 20°C	ASTM D1480	gm/cc	0.830

Additional Information

Castrol Braycote 3214 is fully approved and qualified to MIL-PRF-32014.

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Castrol (UK) Limited, PO BOX 352, Chertsey Road, Sunbury On Thames, Middlesex, TW16 9AW
Orders/Enquiries: 0345 9645111 Technical Enquiries: 0345 082 1719
www.castrol.com/industrial