



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 177°C / 350°F | 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 |

| Name | Method | Units | Baycote 3214 |
|--------------------------|------------|-------|--------------|
| 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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28 May 2013
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