



Braycote 640 ACMS

Grease, Perfluoroether, Heavy Duty, LOX Compatible

Description

Castrol Braycote™ 640ACMS is a perfluoroether based NLGI Grade 3-1/2 lubricating grease thickened with a tetrafluoroethylene telomer and containing approximately forty percent molybdenum disulfide. Castrol Fluoroclean. X100 can be used to remove this lubricant. Refer to the data sheet for Fluoroclean X100 for information regarding this product.

Application

Braycote 640 ACMS is designed for use as a LOX compatible heavy duty grease for high load bearings and sliding surface applications. It can also be utilized as an anti-seize and sealing compound for thread applications. Braycote 640ACMS is suitable for use with fuels and oxidizers such as oxygen. Perfluorinated greases, in general, exhibit excellent shelf lives due to their intrinsic inertness.

Typical Characteristics

Name	Method	Units	Braycote 640 ACMS
Appearance	Visual	-	Smooth, grey
Consistency	ISO 2137 / ASTM D217	NLGI Grade	3.5
Worked Penetration (60 strokes @ 25°C / 77°F)	ISO 2137 / ASTM D217	0.1 mm	214
Molybdenum Disulfide Content	-	% wt	43
LOX Impact Sensitivity	-	Pass	Pass
Evaporation Loss (22hrs @ 204°C / 400°F)	ASTM D2595	% wt	2.0
Density @ 24°C / 75°F	ASTM D4052 / DIN 51757D	kg/m ³	1910
Base Oil Viscosity @ 99°C / 212°F	ISO 3104 / ASTM D445	mm ² /s	26
Base Oil Viscosity @ 38°C / 100°F	ISO 3104 / ASTM D445	mm ² /s	270
Base Oil Viscosity @ 0°C / 32°F	ISO 3104 / ASTM D445	mm ² /s	4,200
Viscosity Index	ISO 2909 / ASTM D2270	-	134
Pour Point	ISO 3016 / ASTM D97	°C/°F	-36/-30
Evaporation Loss (22hrs @ * °C/°F)	ASTM D972	% wt	1
Knudsen Vapour Pressure	-	Torr	8 x 10 ⁻⁸
Knudsen Vapour Pressure	-	Torr	<9 x 10 ⁻⁴

Additional Information

Temperature Range

-36°C to 204°C (-30°F to 400°F) under normal operating conditions and up to 260°C (500°F) for short durations. Lower temperature capability is possible where adequate torque is available.

Limitations

Braycote 640ACMS is compatible with all commonly used metals, plastics and elastomers. It may be adversely affected by Lewis Acids such as aluminum chloride, at elevated temperatures. Rubbing surfaces of aluminum, magnesium, or titanium alloys under certain conditions may react with this product. Such systems should be thoroughly evaluated. Surfaces must be well cleaned of organic rust inhibitors prior to grease application to insure proper lubrication. This product is not recommended for use in applications under high vacuum with loads exceeding 100,000 psi for extended periods of time.

Packaging

Braycote 640ACMS is available in 2 ounce (AVDP) syringes and 1 pound jars.

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