

## Castrol Braycote 1632

Perfluoroether Grease, Low Volatility

### Description

Castrol Braycote 1632 is a smooth, white-translucent, NLGI Grade 2 grease, based on a low volatile perfluoroether base oil and thickened with tetrafluoroethylene gelling agent. Castrol Fluoroclean™ X100 and Castrol Fluoroclean™ HE can be used to remove this lubricant. Refer to the data sheets for information regarding these products.

### Application

Braycote 1632 is designed for use in static and dynamic lubrication of ball and roller bearings, gears, actuator and lead screw drive assemblies. This product can also be used as a thread and elastomer assembly lubricant. Braycote 1632 is compatible with both concentrated acids and bases. Perfluorinated greases, in general, exhibit excellent shelf lives due to their intrinsic inertness.

### Typical Characteristics

TEST (ASTM)	DESCRIPTION	RESULT
D 1403	Penetration @ 25°C (77°F), mm <sup>-1</sup>	
	Unworked	285
	Worked, 60 strokes	284
D 2595	Evaporation Loss, % wt 22 hrs @ 204°C (400°F)	1
FTM 321	Oil Separation, % wt 30 hrs @ 149°C (300°F)	7
D 2265	Dropping Point, °C (°F)	185 (365)
FTM 5309	Copper Strip Corrosion, 24 hrs @ 99°C (210°F)	1b
D 2266	Four-Ball Wear-Test, AWSD, mm 1200 rpm, 40 kgf, 1 hr, 75°C (167°F)	0.92
D 2596	Four-Ball Extreme Pressure Weld Load, kg	400
	AWSD, mm	1.6
	Weld Point, kg	500
D 1478	Low Temperature Torque, 8/cm	
	@ -29°C (-20°F)	
	Starting	1840
	Running, 1 hour	460
	@ -34°C (-30°F)	
	Starting	3500
Running, 1 hour	690	
	@ -40°C (-40°F)	
Starting	16,040	
Running, 1 hour	7198	
Base Oil Characteristics		
D 445	Kinematic Viscosity @ 20°C, cSt	450
Knudsen	Vapor Pressure, torr	
	@ 20°C (68°F)	4 x 10 <sup>-12</sup>
	@ 100°C (212°F)	<8 x 10 <sup>-7</sup>

## Additional Information

### Temperature Range

-40°C to above 232°C (-40°F to above 450°F)

### Limitations

Braycote 1632 is compatible, under normal operating conditions, with conventional metals, plastics, and elastomers. It may be adversely affected by Lewis Acids, such as AlCl<sub>3</sub>, at elevated temperatures. Rubbing surfaces of aluminum, magnesium, or titanium alloys under certain conditions may react with Braycote 1632. 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 1632 is available in 2 oz (AVDP) syringes and 1 pound jars.

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