#### **Product Data**

# Castrol Brayco 1726 and 1727 Plus

Perfluoroether Lubricant Gear, Pump and Lubricating Oil Chemically Inert, Oxidizer Compatible with Added Corrosion Preventive

## **Description**

Castrol Brayco 1726 & 1727 Plus High Viscosity Oils are clear, colorless low molecular weight perfluoroether oil with added corrosion preventive. These oils are chemically inert to virtually all chemicals, and safe to use in direct contact with oxidants such as LOX/GOX and chlorine. They are nonflammable and non-toxic. Brayco 1726 meets the requirements of ISO 150 and Brayco 1727 meets the requirements of ISO 220. Castrol Fluoroclean™ X100 or Castrol Fluoroclean™ HE can be used to clean these products. Refer to the data sheets for Fluoroclean X100 and Fluoroclean HE for more information regarding these products.

## **Application**

Brayco 1726 & 1727 Plus High Viscosity Oils are intended for use as gear, pump, and lubricating oils where direct or indirect contact with aggressive chemicals, oxidants, and where low temperatures are routine. These oils can also be used as vacuum pump oils in operations requiring vapor pressures as low as 10-4 torr. Both oils offer special corrosion protection to iron, copper and a variety of metals. Perfluorinated fluids, in general, exhibit excellent shelf lives due to their intrinsic inertness.

## **Typical Characteristics**

Test (ASTM)	Description	Brayco 1726+	Brayco 1727+
	ISO Grade	150	220
D 287	Specific Gravity @ 16/16°C (60/60°F), gm/ml	1.9	1.91
Table 8	Pounds per Gallon	15.85	15.93
D 445	Kinematic Viscosity, cSt		
	@100°C (212°F)	16.6	24.3
	@ 40°C (104°F)	141.5	224.6
	@ 25°C (77°F)	347.7	526.5
	@-40°C (-40°F)	>1,000,000	>1,000,000
D 2270	Viscosity Index	132	135
D 97	Pour Point, °C (°F)	-36 (-33)	-30 (-22)
D 972	Evaporation Loss, % wt		
	22 hrs @ 60°C (140°F)	0.95	0.78
	22 hrs @ 120°C (248°F)	6.5	5.4
D 2266	Four-Ball Wear-Test, AWSD, mm		
	600 rpm, 2 hrs, 75°C (167°F), 40 kgf	0.56	0.59
D 2783	Four-Ball EP Weld Point		
	Weld Point, kgf	310	310
	Load Wear Index	81	87
D 2879	Vapor Pressure, torr		
	100°C (212°F)	1.8	0.5
	20°C (68°F)	0.05	0.04
D 1331	Surface Tension		
	20°C (68°F), dynes/cm	23.5	23
D 2512	LOX Impact Sensitivity		
	20 drops, 1100 mm	Pass	Pass

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### **Additional Information**

#### **Temperature Range**

-29°C to 177°C (-20°F to 350°F)

#### Limitations

Brayco 1726 & 1727 Plus High Viscosity Oils are compatible with all commonly utilized materials, plastics, and elastomers. These oils may be adversely affected by Lewis Acid Catalysts, such as AlCl3, at elevated temperatures. Newly exposed rubbing surfaces of aluminum, magnesium and titanium may react these products under certain conditions. Such systems should be thoroughly evaluated. Surfaces must be well cleaned of organic rust inhibitors prior to oil application to insure proper lubrication. These products are not recommended for use in applications under high vacuum and loads exceeding 100,000 psi for extended periods of time.

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