

## Castrol Brayco 1624

Perfluoroether Lubricating Oil

### Description

Castrol Brayco 1624 is a clear, colorless perfluoroether oil. It is odorless, nonflammable, and generally chemically inert. It exhibits good thermal stability, is compatible with most commonly used propellants, fuels, and oxidizers. This product has excellent lubricating properties, good dielectric properties, excellent shear stability, and low toxicity. 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

Brayco 1624 is an excellent lubricating oil for precision bearings. This product is recommended for use as a damping fluid, flotation fluid, and a electrical contacts lubricant. This product is compatible with concentrated acids and bases and does not hydrolyze or oxidize. Perfluorinated fluids, in general, exhibit excellent shelf lives due to their intrinsic inertness.

### Typical Characteristics

TEST METHOD	DESCRIPTION	RESULT
D 287	Specific Gravity @ 16/16°C (60/60°F)	1.89
	Pounds per Gallon @ 16°C (60°F)	15.75
D 445	Viscosity, cSt	
	@ 100°C (212°F)	4.2
	@ 40°C (104°F)	24
	@ 20°C (68°F)	64
	@ -29°C (-20°F)	1,326
	@ -40°C (-40°F)	17,500
@ -54°C (-65°F)	234,900	
D 2270	Viscosity Index	55
D 972	Evaporation Loss, % wt	
	22 hrs @ 120°C (248°F)	2.5
	22 hrs @ 149°C (300°F)	13
D 97	Pour Point, °C (°F)	-54 (-65)
D 974	Neutralization Number, mgKOH/g	0.02
Knudsen	Vapor Pressure, torr	
	@ 20°C (68°F)	$4 \times 10^{-6}$
	@ 100°C (212°F)	$7 \times 10^{-3}$

## Additional Information

### Temperature Range

-54°C to 149°C (-65°F to 300°F)

### Limitations

Brayco 1624 is compatible with all commonly utilized materials, plastics, and elastomers. It is only slightly soluble in most organic solvents and fluids other than highly fluorinated solvents. Brayco 1624, like all perfluoroether based lubricants, may be adversely affected by Lewis Acids such as aluminum chloride at elevated temperatures. Newly exposed rubbing surfaces of aluminum, titanium, or magnesium alloys may react with this product under certain conditions. Such systems should be thoroughly evaluated prior to use. Surfaces must be well cleaned of organic rust inhibitors prior to oil applications to insure proper lubrication.

### Packaging

Brayco 1624 is available in 2 oz (AVDP) bottles.

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Castrol Industrial North America Inc. 150 West Warrenville Road, 605 3E Naperville, IL 60563  
Tel: (877) 641 1600 Fax: (877) 648 9801

[www.castrol.com/industrial](http://www.castrol.com/industrial)

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