



## Brayco™ 1625

Perfluoroether Lubricating Oil

### Description

Castrol Brayco™ 1625 is a clear water-white perfluoroether oil. It is odorless, non-flammable and generally chemically inert. It exhibits good thermal stability, is compatible with most commonly used propellants, fuels, and oxidizers, and is virtually unaffected by high gamma radiation doses. Other characteristics include excellent lubricating properties, good dielectric properties, excellent shear stability and low order of acute toxicity. Brayco IC X-100 (formerly Fluoroclean™X100) can be used to remove this lubricant. Refer to the data sheet for Brayco IC X-100 for information regarding this product

### Application

Brayco 1625 is an excellent lubricating oil for precision bearings. It can also be utilized as a damping fluid, flotation fluid, and lubricant for electrical contacts. Perfluorinated fluids, in general, exhibit excellent shelf lives due to their intrinsic inertness.

### Typical Characteristics

Name	Method	Units	Brayco 1625
Specific Gravity @ 16°C / 60°F	ASTM D287	-	1.914
Density of finished grease @ 16°C / 60°F	In-house test	lb/gallon	15.94
Kinematic Viscosity @ 99°C / 210°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	11.6
Kinematic Viscosity @ 38°C / 100°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	97.47
Viscosity Index	ISO 2909 / ASTM D2270	-	117
Pour Point	ISO 3016 / ASTM D97	°C/°F	-36 / -30
Evaporation Loss, 22 hrs @ 149°C / 300°F	ASTM D972	%wt	0.79
Knudsen Vapour Pressure @ 20°C / 68°F	-	Pa	0.01197
Knudsen Vapour Pressure @ 100°C / 212°F	-	Pa	1.197

## Additional Information

### Temperature Range

-30°C to 204°C (-22°F to 400°F)

### Limitations

Brayco 1625 is compatible with all commonly utilized materials, plastics, and elastomers. It is very slightly soluble in most organic solvents and materials excluding highly fluorinated solvents. Lewis Acids such as  $\text{AlCl}_3$  can adversely affect Brayco 1625 at elevated temperatures. Newly exposed rubbing surfaces of aluminum, titanium, and magnesium may react with this product under certain conditions; such systems should be thoroughly evaluated. To ensure proper lubrication, surfaces must be free of organic rust inhibitors prior to grease application .

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