EOF
Eltinert F Oil

The Eltinert series of contact lubricants have been developed to provide superior protection to electrical contacts under the most difficult conditions. These include extended periods at high temperatures and under corrosive chemical atmospheres. They are also ideal for the protection of noble metals, either in switches or connectors. EOF is an oil version suitable for applications with high insertion forces.

- Oil version; ideal for use in applications with high insertion forces
- Excellent electrical characteristics combined with very good plastics compatibility
- Excellent oxidation and chemical resistance; high protection in harsh environments
- Prevents and cures high contact resistance caused by silicone contamination

Approvals	**RoHS Compliant (2015/863/EU):**	**Yes**

Typical Properties

Colour	Colourless
Density (g/ml)	1.91
Temperature Range (°C)	-25 to +300
Vapour Pressure	10^{-3} Torr @ 20°C 8 x 10^{-2} Torr @ 250°C
Evaporation Weight Loss (% 22 hours @ 150°C)	<1
Copper Strip Corrosion (IP154 / ISO 2160)	Nil
Base Oil Type	PFPE
Base Oil Viscosity @ 20°C (Kinematic Viscosity (cSt))	1500
Base Oil Viscosity Index (ASTM D 2270)	130
Pour Point (ASTM D 97 (°C))	-25
Flash Point (COC ASTM D 92 (°C))	Not determined
Surface Tension (Dynes/cm)	21
UV Trace	No

Electrical Properties:

Dielectric Constant (1 MHz)	2.1
Dielectric Strength (kV/mm ASTM D877/67 @ 250°C)	40

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Electrolube cannot be held responsible for the performance of its products within any application determined by the customer, who must satisfy themselves as to the suitability of the product.

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Description	Packaging	Order Code	Shelf Life
Eltinert F Oil	1kg Bulk	EEOF01K	72 Months
	5ml Pen	EEOF05P	48 Months

Typical Product Applications

Eltinert F Oil is suitable for contacts requiring thin films of lubricants or to provide assistance with high insertion forces. A diluted oil version (DOF) for surfaces requiring very thin films of lubricant is also available. For greater environmental protection Eltinert F Grease (EGF) is recommended.

The polar nature of these lubricants ensures good bonding to all metals, including gold. Although gold itself is not subject to environmental attack, gold plate is porous and attack can occur on the substrate metals, e.g. silver, copper or tin. Eltinert F prevents this attack and can allow the use of thinner gold plate.

Eltinert F fluorinated lubricants have two main areas of application:

1. As contact lubricants - particularly suitable for contacts involving gold and/or aggressive environments e.g., printed circuit edge connectors, plug connectors, rotary and sliding switches.
2. For the lubrication of plastics and rubbers, including those known to be particularly prone to solvent stress cracking.

The following plastics, normally regarded as prone to solvent stress cracking, are unaffected by Eltinert F at 70°C: 'Noryl' (PPO/Polystyrene), Polystyrene, Impact modified polystyrene, ABS, Polycarbonate.

The following vulcanised rubbers showed minimal change in properties at 70°C: Natural rubber, EPDM, SBR, Butadiene-acrylonitrile, Butyl.

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