**PCTFE - polychlorotrifluoroethylene**

Trade name: KEL-F or VOLTALEF

**PCTFE DESCRIPTION**

PCTFE offers the unique combination of physical and mechanical properties, no flammability, chemical resistance, near zero moisture absorption, and excellent electrical properties. These characteristics cannot be found in any other thermoplastic fluoropolymer with a useful temperature range of (-240°C to +204°C). PCTFE can be used near to – 273°C (in liquid air).

E module of PCTFE at -183°C: 7.7 MPa (2 x PTFE and 12 x PTFE at 20°C)

PCTFE thermal expansion: ¼ of PTFE

PCTFE also has extremely low outgassing (0.01% TML, 0.00% CVCM, 0.00% WVR when tested per ASTM E-595-90), so it is suitable for use in aerospace and flight applications.

**APPLICATIONS**

- Cryogenic applications - super-cold refrigeration components
- Valves - seats, stems, seals
- Seals - lips, o-rings, v-rings, special construction seals
- Compressors & pumps
- Films - food packaging, pharmaceutical packaging, optical recording, electroluminescent display panels
- Gaskets - pressure, diaphragm, liquid gauge seals, fluid handling
- Bearings - sleeve & thrust
- Stock shapes - for machining components