

## Material Data Sheet

### PFA - Perfluoroalkoxy resin

#### General

- Excellent mechanical properties
- Extremely high weathering resistance and UV stability
- High thermal resistance
- Very good electrical strength
- Low friction behavior
- Flame retardant
- Excellent chemical resistance
- Very low surface energy
- Excellent dielectric properties
- Very low surface roughness

#### Physical properties

Density(Specific Gravity)	ASTM D-792	g/cm <sup>3</sup> (gm / cc)	2.13 - 2.17
Water Absorption(Max.) 24 hours	ASTM D-570	%	<0.03
Flammability		-	V-0

#### Mechanical properties

Tensile Strength	ASTM D-638	MPa	≥23
Elongation of Break	ASTM D-638	%	≥250
Tensile modulus	ASTM D-638	MPa	500 - 600
Hardness Shore	ASTM D-2240	Shore D	50 - 65

#### Thermal properties

Peak Melting Temperature	ASTM D-3418	°C	300 - 310
Specific heat capacity, at 23°C	DSC	kJ kg <sup>-1</sup> °C <sup>-1</sup>	0.9 - 1.1
Thermal conductivity, at 23°C	ASTM E-1530	W/mK	0.2
Continuous use temperature	-	°C	260
Oxygen Index,Loi	ASTM D-2863	%	95

#### Electrical properties

Dielectric strength, 0.25mm thick	ASTM D-149	Kv/mm	35 - 40
Surface Resistivity	ASTM D-258	ohm	>10 <sup>17</sup>
Volume Resistivity	ASTM D-257	ohm cm	>10 <sup>17</sup>
Arc Resistance	ASTM D-495	S	>200

- NOTE:
- \*The data stated above are typical values intended for reference and comparison purposes only.
  - \*The data should not be used as a basis for design specifications or quality control.
  - \*The information is provided as a guide to the best of our knowledge and given without obligation or liability.
  - \*Testing under individual application circumstances is recommended.