

AF708 PCTFE Material Data Sheet

PCTFE is a homopolymer of Chlorotrifluoroethylene. Optical transparency, high compressive strength, low deformation under load, rigidity, chemical inertness and effectively zero moisture absorption are just some of the key properties of this polymer. PCTFE has a low melt viscosity which permits extrusion, compression moulding and injection moulding. Typical uses include valve seats, seals, sight glasses and windows and many cryogenic applications.

- Cryogenic applications
- Excellent resistance to cold flow
- Dimensional stability throughout a wide temperature range
- Extremely low gas permeability
- Extremely low moisture absorption
- FDA Approved
- Rigidity
- Optical Transparency

Typical Physical Properties

Property	Test Method	Value
Density	ASTM D792	2.10 – 2.18
Tensile (At break) 23°C	ASTM D638	40 MPa
Tensile (At break) 100°C	ASTM D638	10 MPa
Tensile (At break) 150°C	ASTM D638	4 MPa
Tensile (At break) -129°C	ASTM D638	150 MPa
Tensile (At break) -252°C	ASTM D638	200 MPa
Elongation (At break) 23°C	ASTM D638	150%
Elongation (At break) 100°C	ASTM D638	500 - 800%
Elongation (At break) 150°C	ASTM D638	400 - 600%
Elongation (At break) -129 °C	ASTM D638	9%
Elongation (At break) -252 °C	ASTM D638	5%
Hardness 23°C	Shore D	80
Hardness 50°C	Shore D	80
Hardness 100°C	Shore D	67
Flammability	UL94	V-0

Physical properties are based on material moulded from Daikin M400H polymer resin

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All information is based on typical test results performed under specific conditions and limited sample size. This does not represent a legally binding guarantee of certain properties or the suitability for specific applications. All information is provided in good faith at time of print.

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