



DRAKE PCTFE

Superior Cryogenic Sealing

DESCRIPTION

DRAKE PCTFE (polychlorotrifluoroethylene) machinable shapes are produced from Arkema's Voltalef® 302 resin. PCTFE is recognized for its chemical resistance, low flammability and its retention of mechanical properties at cryogenic temperatures.

TYPICAL APPLICATIONS:

- Seals and gaskets
- Valve seats and pumps
- Diaphragms and impellers
- Connectors and insulators

RESIN PROPERTIES DATA – VOLTALEF 302¹

PHYSICAL PROPERTIES	METRIC	METHODS
Density (Amorphous / Crystalline)	2.10 / 2.16	ISO R 1183D
Shore Hardness	76 - 80 D	ISO 868
Tensile Properties		
Strength @ yield	34 - 50 MPa	
Elongation @ yield	7-9%	ISO R 527
Elongation @ break	> 50%	
Flexural Modulus	1000 - 1500 MPa	ISO 178
Izod Impact (notched) @ 23°C / 73°F	80 J/m	ISO 180
THERMAL PROPERTIES		
Zero Strength Time (ZST) @ 250°C, 7.5g	300 - 450 S	ASTM D 1430
Heat Distortion Temperature (HDT) @ 1.80 MPa / 264psi load	70°C	ISO 175
Melting Point	214°C	ISO 3416 C
FLAMMABILITY		
Flammability, 0.8mm	V-0	UL 94
Limiting Oxygen Index	95%	
ELECTRICAL PROPERTIES		
Dielectric Strength @ 23°C (73.4°F)	21 kV/mm	IEC 60243-1
Volume resistivity	2*10E12 ohm*m	
Surface resistivity	1*10E15 ohm/sq	

¹**Arkema Voltalef® product disclaimer:** Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.