CS Hyde Company

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PRODUCT INFORMATION

15-ROD and Sheet Virgin PTFE Material

PTFE Rod is commonly used in valve applications ranging from hot water valves, caustic chemical valves, simple steam applications and when high heat (up to 500°F) and chemical resistance is needed. PTFE Sheeting is has a very slippery surface with low coefficient of friction, it is used in many applications such as chute liners. PTFE has excellent dielectric properties and is a excellent insulator in electric cables, and can be used in printed circuit boards.

TECHNICAL DATA

Property	Test Method	Unit	Molded Items (Homopolymer)	Extruded Items (Modified)	
Specific Gravity	ASTM D 792		2,17 / (2,15)	2,18 / (2,18)	
Tensile Strength	ASTM D 4894	MPa	30 / (22)	28 / (24)	
Elongation at Break	ASTM D 4894	%	300 / (220)	400 / (300)	
Hardness	ASTM D 2240	Shore D	55	55	
Deformation under load (24h, 13.7 Mpa, 23°C)	ASTM D 621	%	13	10	
Permanent deformation (after 24h without load)	ASTM D 621	%	7	5	
Compressive strength 1% deformation	ASTM D 695	MPa	5	6	
Friction coefficient – static	ASTM D 3028 (1)		0,07	0,07	
Friction coefficient – dynamic	ASTM D 3028 (1)		0,05	0,05	
Coefficient of linear thermal expansion from 25 to 100°C	ASTM D 696	°C-1	13 x 10 ⁻⁵	15 x 10 ⁻⁵	
Thermal conductivity	ASTM C 177	W/mK	0,20	0,20	
Dielectric strength (in air, thickness 0,125 mm)	ASTM D 149	kV/mm	80	100	
Dielectric constant (50-109 Hz)	ASTM D 150		2,1	2,1	
Dissipation factor	ASTM D 150		<0,0002	<0,0002	
Volume resistivity	ASTM D 257	Ohm/cm	1017	1017	
Surface resistivity (2) ASTM D 257	Ohm	10 ¹⁶	10 ¹⁶	

*The above values are "Typical Values" which have a nominal range about them and are not intended for specification purposes.