



PVC

TYPICAL PROPERTIES of PVC and CPVC

ASTM or UL test	Property	PVC	CPVC
PHYSICAL			
D792	Density (lb/in ³) (g/cm ³)	0.051 1.41	0.055 1.52
D570	Water Absorption, 24 hrs (%)	0	0.04
MECHANICAL			
D638	Tensile Strength (psi)	7,500	8,200
D638	Tensile Modulus (psi)	411,000	430,000
D638	Tensile Elongation at Break (%)	-	27
D790	Flexural Strength (psi)	12,800	15,000
D790	Flexural Modulus (psi)	481,000	410,000
D785	Hardness	115 (Rockwell R)	121 (Rockwell R)
D256	IZOD Notched Impact (ft-lb/in)	1.0	1.6
THERMAL			
D696	Coefficient of Linear Thermal Expansion (x 10 ⁻⁵ in./in./°F)	6.1	3.7
D648	Heat Deflection Temp (°F / °C) at 264 psi	176 / 80	217 / 103
D3418	Melting Temp (°F / °C)	n.a.	n.a.
-	Max Operating Temp (°F / °C)	140 / 60	200 / 93
C177	Thermal Conductivity (BTU-in/ft ² -hr-°F) (x 10 ⁻⁴ cal/cm-sec-°C)	0.90 3.1	0.95 3.3
UL94	Flammability Rating	V-O	V-O
ELECTRICAL			
D149	Dielectric Strength (V/mil) short time, 1/8" thick	544	1250
D150	Dielectric Constant at 60 Hz	3.2	3.7
D150	Dissipation Factor at 60 Hz	.0096	-
D257	Volume Resistivity (ohm-cm) at 50% RH	5.4 x 10 ¹⁵	3.4 x 10 ¹⁵

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets.

All values at 73°F (23°C) unless otherwise noted.