PROTOLABS
Manufacturing. Accelerated.

PVC

Polyvinyl Chloride (PVC) is an extremely versatile polymer and used widely across many industries due to its exceptional corrosion resistance, high strength-to-weight ratio, and cost efficiency.

Applications

Some common applications include pipes, fittings, medical devices, wire and cable insulation, flooring, and construction applications.

Key Product Benefits

- Extremely High Corrosion and Chemical Resistance
- Cost Effective
- Machinability
- High Strength-to-Weight Ratio
- Flammability

Properties

Property	Test Method	Value
Density	ASTM D792	1.41-1.44 g/cm^3
Water Absorption	ASTM D570	<0.2%
Flammability	UL 94	V-0
Tensile Strength @ Yield	ASTM D638	7,500-9,000 psi
Tensile Modulus	ASTM D638	411,000-486,000 psi
Notched Impact Strength	ASTM D256	0.8-1.0 ft-lb/in
Shore Hardness (D Scale)	ASTM D2240	82-89
Vicat Softening Temperature	ASTM D1525	167-181°F
Heat Deflection Temperature @ 264 psi	ASTM D648	154-176°F
Coefficient of Linear Thermal Expansion	ASTM D696	3.2-4.4 x 10-5 in/in/°F
Dielectric Constant @ 60 Hz	ASTM D150	3.2-3.9
Volume Resistivity	ASTM D257	>10^{15} ohm-cm
Dielectric Strength	ASTM D149	300-550 V/mil