Corzan CPVC (Quadrant)

ASTM D1748, Cell Classification

Physical Properties	Metric	English	Comments
Specific Gravity	1.56 g/cc	0.0564 lb/in³	ASTM D792
Water Absorption	Max 0.04 %	Max 0.04 %	Immersion, 24hr; ASTM D570(2)
Water Absorption at Saturation	Max 0.04 %	Max 0.04 %	Immersion; ASTM D570(2)
Mechanical Properties			
Hardness, Shore D	84	84	ASTM D2240
Tensile Strength, Ultimate	42.4 MPa	6150 psi	ASTM D638
Elongation at Break	12 %	12 %	ASTM D638
Tensile Modulus	1.79 GPa	260 ksi	ASTM D638
Flexural Modulus	2.68 GPa	388 ksi	ASTM D790
Flexural Yield Strength	46.2 MPa	6700 psi	ASTM D790
Compressive Strength	96.5 MPa	14000 psi	10% Def., 73°F; ASTM D695
Compressive Modulus	2.41 GPa	350 ksi	ASTM D695
Izod Impact, Notched	1.71 J/cm	3.2 ft-lb/in	ASTM D256 Type A
Electrical Properties			
Surface Resistivity per Square	Min 1e+012 ohm	Min 1e+012 ohm	ASTM D257
Thermal Properties			
Maximum Service Temperature, Air	93.3 °C	200 °F	Long Term
Flammability, UL94 (Estimated Rating)	V-0	V-0	1/8 inch
Qualitative Processing Properties			
Compliance - FDA	Non-Compliant		
Machinability	6		1-10, 1=Easier to Machine
Service in Alcohols	Acceptable Service		
Service in Aromatic Hydrocarbons	Limited Service		
Service in Chlorinated Solvents	Limited Service		
Service in Ethers	Unacceptable		
Service in Ketones	Unacceptable		
Service in Strong Acids	Limited Service		
Service in Strong Alkalies	Acceptable Service		
Service in Sunlight	Limited Service		
Service in Weak Acids	Acceptable Service		
Service in Weak Alkalies	Acceptable Service		