

Azdel AZMET® CM20350 35% continuous random fiber mat / PBT resin matrix

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT)

Material Notes:

AZDEL® CM20350 is a glass mat thermoplastic laminate based upon a random oriented continuous fiber mat contained within a Polybutylene Terephthalate (PBT) resin matrix. This composite material features high flow properties and a generally homogeneous fiber distribution. This material is typically used for standard semi-structural applications where high stiffness and impact are desired. Mechanical properties and mold shrinkage measured on flat plaques. Information provided by Azdel.

	1.62 g/cc	1.62 g/cc	Molded; ASTM D792
Filler Content	35 %	35 %	By weight (ashing); Internal
Thickness	3350 microns	132 mil	Sheet; Internal
Linear Mold Shrinkage	0.0030 - 0.0040 cm/cm	0.0030 - 0.0040 in/in	Measured on flat plaques; ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	104 MPa	15100 psi	ISO 527
Elongation at Break	2.0 %	2.0 %	ISO 527
Tensile Modulus	8.28 GPa	1200 ksi	ISO 527
Flexural Strength	220 MPa	31900 psi	ISO 178
Flexural Modulus	8.28 GPa	1200 ksi	ISO 178
Poissons Ratio	0.32	0.32	ISO 527
Izod Impact, Notched	6.94 J/cm @Thickness 4.00 mm, Temperature 23.0 °C	13.0 ft-lb/in @Thickness 0.157 in, Temperature 73.4 °F	ISO 180
Impact Test	29.0 J @Thickness 4.00 mm	21.4 ft-lb @Thickness 0.157 in	Multi-axial, at failure; ASTM D3763

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	218 °C	424 °F	ASTM D648

Descriptive Properties	Value	Comments
Color	Black	Internal