Preliminary Product Data
Rev. 8/4/2007

CoolPoly® D1202 Thermally Conductive Polypropylene (PP)

CoolPoly D series of thermally conductive plastics transfers heat, a characteristic previously unavailable in injection molding grade polymers. CoolPoly is lightweight, netshape moldable and allows design freedom in applications previously restricted to metals. The D series is electrically non-conductive and can be used for its dielectric properties.

Thermal	SI/Metric	Testing Standard
Thermal Conductivity	5 W/mK	ASTM E1461
Thermal Diffusivity	0.025 cm²/sec	ASTM E1461
Specific Heat	1.3 J/g°C	ASTM E1461

Mechanical	SI/Metric	English	Testing Standard
Tensile Modulus	5300 MPa	770 ksi	ISO 527-1
Tensile Strength	24 MPa	3480 psi	ISO 527-1
Nominal Strain @ Break	0.57 %	0.57 %	ISO 527-1
Flexural Modulus	6200 MPa	900 ksi	ISO 178
Flexural Strength	43 MPa	6200 psi	ISO 178
Impact Strength			
Charpy Unnotched	6.8 kJ/m²	3.2 ft-lb/in²	ISO 179-1
Charpy Notched	1.5 kJ/m²	0.7 ft-lb/in²	ISO 179-1

Physical	SI/Metric	English	Testing Standard
Density	1.39 g/cc	0.049 lb/in³	ISO 1183
Mold Shrinkage			
Flow	0.3 %	0.003 in/in	ASTM D551
Cross-Flow	0.6 %	0.006 in/in	ASTM D551