



CoolPoly® D3606 Thermally Conductive Polyamide 4,6 (PA 4,6)

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	1.5 W/mK		ASTM E1461
Thermal Diffusivity	0.0087 cm ² /sec		ASTM E1461
Specific Heat	1.15 J/g°C		ASTM E1461
Temperature of Deflection			
@ 0.45MPa	291 °C		ISO 75-1,2
@ 1.80MPa	287 °C		ISO 75-1,2
Flammability	V0 @ 1.0mm		UL 94
Mechanical	SI/Metric	English	Testing Standard
Tensile Modulus	10650 MPa	1544 ksi	ISO 527-1
Tensile Strength	80 MPa	11600 psi	ISO 527-1
Nominal Strain @ Break	1.0 %	1.0 %	ISO 527-1
Flexural Modulus	8550 MPa	1239 ksi	ISO 178
Flexural Strength	130 MPa	18850 psi	ISO 178
Impact Strength			
Charpy Unnotched	14 kJ/m ²	6.6 ft-lb/in ²	ISO 179-1
Charpy Notched	4.3 kJ/m ²	2.0 ft-lb/in ²	ISO 179-1
Physical	SI/Metric	English	Testing Standard
Density	1.65 g/cc	0.06 lb/in ³	ISO 1183
Mold Shrinkage			
Flow	0.4 %	0.004 in/in	ASTM D551
Cross-Flow	0.7 %	0.007 in/in	ASTM D551
Water Absorption	1.2 %	1.2 %	ISO 62

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