

CoolPoly® D3610

Thermally Conductive Polyamide (PA)

Description

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.

Physical Properties	Value	Unit	Test Standard
Density	1900	kg/m ³	ISO 1183
Mold Shrinkage – Parallel	0.4	%	ISO 294-4
Mold Shrinkage – Normal	0.5	%	ISO 294-4
Mechanical Properties	Value	Unit	Test Standard
Tensile Modulus	15600	MPa	ISO 527-1
Tensile Strength	90	MPa	ISO 527-1
Strain @ Break	0.7	%	ISO 527-1
Flexural Modulus	14000	MPa	ISO 178
Flexural Strength	110	MPa	ISO 178
Charpy Unnotched (23°C)	12.0	kJ/m ²	ISO 179-1
Electrical Properties	Value	Unit	Test Standard
Dielectric Strength	9.3	kV/mm	ASTM D149
Thermal Properties	Value	Unit	Test Standard
Thermal Conductivity, In-Plane	1.9	W/mK	ASTM E1461
Thermal Diffusivity, In-Plane	0.01	cm ² /sec	ASTM E1461
Specific Heat	1.1	J/g°C	ASTM E1461
Flammability	V0 @ 1.5mm		UL 94