

Product Texts

CoolPoly D series of thermally conductive plastics transfers heat, a characteristic previously unavailable in injection molding grade polymers. CoolPoly is lightweight, net-shape moldable and allows design freedom in applications previously restricted to metals and ceramics. The D series is electrically insulative and provides inherent electrical isolation characteristics.

Flammability at thickness h (3 V-0
mm)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.4	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.4	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	10300	MPa	ISO 527
^[C] Stress at break	48	MPa	ISO 527
^[C] Strain at break	0.68	%	ISO 527
^[C] Charpy impact strength, +23°C	7.4	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	0.9	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	165	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	205	°C	ISO 75-1/-2
^[C] Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	3.0	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 1MHz	3.6	-	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	140	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1620	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Applications

Electrical and Electronical

Special Characteristics

Thermally Conductive