

Product Texts

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.

Flammability at thickness h (1 V-0
mm)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.1	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.3	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	9887	MPa	ISO 527
^[C] Stress at break	50	MPa	ISO 527
^[C] Strain at break	0.86	%	ISO 527
^[C] Charpy impact strength, +23°C	7	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	3.6	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	228	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	277	°C	ISO 75-1/-2
^[C] Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	1.0	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 1MHz	3.8	-	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	220	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	1750	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Special Characteristics

Thermally Conductive

Applications

Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific