CoolPoly® D3610

Polyamide 66/6 Copolymer

Celanese Corporation

Message:

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.

General Information			
Features	Electrically Insulating Thermally Conductive		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.90	g/cm³	ISO 1183
Molding Shrinkage			ASTM D551
Flow	0.40	%	
Across Flow	0.50	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	15600	MPa	ISO 527-2
Tensile Stress	90.0	MPa	ISO 527-2
Nominal Tensile Strain at Break	0.70	%	ISO 37
Flexural Modulus	14000	MPa	ISO 178
Flexural Stress	110	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength	12	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Specific Heat	1100	J/kg/°C	ASTM E1461
Thermal Conductivity	1.9	W/m/K	ASTM E1461
Thermal Diffusivity	0.0100	cm²/s	ASTM E1461
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength	9.3	kV/mm	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.50 mm)	V-0		UL 94
Injection	**Nominal Value**	**Unit**	
Drying Temperature	104	°C	
Drying Time	12 to 24	hr	
Rear Temperature	221 to 252	°C	
Middle Temperature	232 to 277	°C	
Front Temperature	238 to 277	°C	

Nozzle Temperature	238 to 277	°C
Processing (Melt) Temp	232 to 282	°C
Mold Temperature	38.0 to 93.0	°C
Injection Pressure	5.20 to 13.8	MPa
Injection Rate	Moderate-Fast	
Holding Pressure	3.40 to 10.3	MPa
Back Pressure	0.500 to 3.00	MPa
Screw Speed	50 to 150	rpm
Cushion	6.30 to 12.7	mm
Screw Compression Ratio	2.5:1.0	

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China