

COOLPOLY® D5526

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CoolPoly® D5526 offers thermal conductivity, excellent mechanical strength, surface appearance, low warpage, and excellent dimensional stability. Application for this grade is for a part with thin wall design in automotive and electronics. The D series is electrically non-conductive and can be used for its dielectric properties.

Product information

Resin Identification	LCP-MD	ISO 1043
Part Marking Code	>LCP-MD<	ISO 11469

Rheological properties

Moulding shrinkage, parallel	0.1 %	ISO 294-4, 2577
Moulding shrinkage, normal	0.3 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	10000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	82 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.1 %	ISO 527-1/-2
Flexural modulus	10000 MPa	ISO 178
Flexural strength	110 MPa	ISO 178
Charpy impact strength, 23°C	13 kJ/m ²	ISO 179/1eU
Poisson's ratio	0.34 ^[C]	

[C]: Calculated

Thermal properties

Temperature of deflection under load, 1.8 MPa	261 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	11 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	22 E-6/K	ISO 11359-1/-2
Thermal conductivity, flow	4.8 W/(m K)	ISO 22007-2
Thermal conductivity, crossflow	3.4 W/(m K)	ISO 22007-2
Thermal conductivity, through plane	0.8 W/(m K)	ISO 22007-2

Flammability

Burning Behav. at thickness h	V-0 class	IEC 60695-11-10
Thickness tested	0.2 mm	IEC 60695-11-10
UL recognition	yes	UL 94

Electrical properties

Volume resistivity	>1E13 Ohm.m	IEC 62631-3-1
Surface resistivity	1E14 Ohm	IEC 62631-3-2
Electric strength	41 kV/mm	IEC 60243-1

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Physical/Other properties

Density

1840 kg/m³

ISO 1183

Characteristics

Processing

Injection Moulding

Special characteristics

Flame retardant, Low Warpage