

COOLPOLY® D1202

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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.

Product information

Resin Identification	PP	ISO 1043
Part Marking Code	>PP<	ISO 11469

Typical mechanical properties

Tensile modulus	2540 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	15.4 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	5.5 %	ISO 527-1/-2
Flexural modulus	3210 MPa	ISO 178
Flexural strength	29 MPa	ISO 178
Charpy impact strength, 23°C	20.6 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	1.5 ^[1] kJ/m ²	ISO 179/1eA
Poisson's ratio	0.38 ^[C]	

[C]: Calculated

[1]: RI Data

Thermal properties

Thermal conductivity, flow	4.5 W/(m K)	ISO 22007-2
Thermal conductivity, crossflow	3.6 W/(m K)	ISO 22007-2
Thermal conductivity, through plane	1 W/(m K)	ISO 22007-2
Specific heat capacity of melt	1300 ^[2] J/(kg K)	ISO 22007-4

[2]: RI data

Physical/Other properties

Density	1390 kg/m ³	ISO 1183
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Injection

Back pressure	0.35 MPa
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Characteristics

Processing	Injection Moulding
Special characteristics	U.V. stabilised or stable to weather, High Flow