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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/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	1.5 ^[1]	kJ/m²	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/m³ ISO 1183

Injection

Back pressure 0.35 MPa

Characteristics

Processing Injection Moulding

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

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Revised: 2025-03-25 Source: Celanese Materials Database

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