

COOLPOLY® D1202

CoolPoly D1202 is a thermally conductive, electrically non-conductive PP based grade with high toughness and chemical resistance.

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.

Typical mechanical properties

Tensile Modulus	2536 MPa	ISO 527-1/-2
Stress at break, 5mm/min	15.4 MPa	ISO 527-1/-2
Strain at break, 5mm/min	5.51 %	ISO 527-1/-2
Flexural Modulus	3210 MPa	ISO 178
Flexural Strength	28.8 MPa	ISO 178
Charpy impact strength, 23°C	20.6 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	1.5 kJ/m ²	ISO 179/1eA

Thermal properties

Spec. heat capacity solid	1300 J/(kg K)	Internal
Thermal conductivity in plane, in flow	4.5 W/(m K)	ASTM E 1461
Thermal conductivity in plane, cross flow	3.6 W/(m K)	ASTM E 1461
Thermal conductivity through plane	1 W/(m K)	ASTM E 1461

Other properties

Density	1390 kg/m ³	ISO 1183
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Injection

Drying Temperature	82 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Max. mould temperature	20 - 65 °C
Back pressure	MPa
Injection speed	medium-fast

