

COOLPOLY® E2

Typical mechanical properties

Tensile Modulus	21000 MPa	ISO 527-1/-2
Stress at break, 5mm/min	81 MPa	ISO 527-1/-2
Strain at break, 5mm/min	0.4 %	ISO 527-1/-2
Flexural Modulus	41000 MPa	ISO 178
Flexural Strength	160 MPa	ISO 178
Charpy impact strength, 23°C	8.5 kJ/m ²	ISO 179/1eU

Thermal properties

Temp. of deflection under load, 1.8 MPa	268 °C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	8 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	9 E-6/K	ISO 11359-1/-2
Spec. heat capacity solid	900 J/(kg K)	Internal
Thermal conductivity in plane, in flow	16.5 W/(m K)	ASTM E 1461
Thermal conductivity through plane	3.6 W/(m K)	ASTM E 1461

Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0 class	UL 94
Thickness tested	1.5 mm	UL 94

Electrical properties

Volume resistivity	0.001 Ohm.m	IEC 62631-3-1
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Injection

Drying Temperature	130 - 140 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Max. mould temperature	135 - 141 °C

