Celanese
The chemistry inside innovation™

CELANEX® 4002

CELANEX® PBT

Product information

Resin Identification	PBT-I		ISO 1043
Part Marking Code	>PBT-I<		ISO 11469

Rheological properties

Melt mass-flow rate	4	g/10min	ISO 1133
Melt mass-flow rate, Temperature	482	°F	
Melt mass-flow rate, Load	4.76	lb	
Molding shrinkage, parallel	1.8	%	ISO 294-4, 2577
Molding shrinkage, normal	1.7	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	210000	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	4600	psi	ISO 527-1/-2
Tensile strain at yield, 50mm/min	4	%	ISO 527-1/-2
Flexural modulus	210000	psi	ISO 178
Flexural strength	7250	psi	ISO 178
Charpy notched impact strength, 23°C	14.3	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	19	ftlb/in²	ISO 180/1A

Thermal properties

Melting temperature, 10°C/min	437	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	120	°F	ISO 75-1/-2

Physical/Other properties

Density	0.0448	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	248	°F
Drying Time, Dehumidified Dryer	4	h
Processing Moisture Content	≤0.02	%
Melt Temperature Optimum	482	°F
Min. melt temperature	464	°F
Max. melt temperature	500	°F
Max. screw tangential speed	0.1 - 0.3	m/s
Mold Temperature Optimum	176	°F
Min. mold temperature	140	°F
Max. mold temperature	266	°F

Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified

Revised: 2025-06-12 Source: Celanese Materials Database

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