CELANEX® 6402V

CELANEX® PBT

Celanex 6402V is a 40% Glass / mineral filled polyester.

Product information

Resin Identification	PBT-(GF+MD)40	ISO 1043
Part Marking Code	>PBT-(GF+MD)40<	ISO 11469

Rheological properties

Melt mass-flow rate	22	g/10min	ISO 1133
Melt mass-flow rate, Temperature	509	°F	
Melt mass-flow rate, Load	4.76	lb	
Molding shrinkage, parallel	0.1	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	1.96E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	21300	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.1	%	ISO 527-1/-2
Flexural modulus	1.81E6	psi	ISO 178
Flexural strength	31900	psi	ISO 178
Charpy notched impact strength, 23°C	3.57	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	3.3	ftlb/in²	ISO 180/1A
Izod impact strength, 23°C	30.5	ftlb/in²	ISO 180/1U

Thermal properties

Temperature of deflection under load, 1.8 MPa	401	°F	ISO 75-1/-2

Physical/Other properties

Density	0.0599	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	212	°F
Min. mold temperature	194	°F
Max. mold temperature	266	°F

Revised: 2025-06-27 Source: Celanese Materials Database

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Characteristics

Processing	Injection Molding
Special characteristics	High Gloss, Low Warpage

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