

VINPOL™ PBT1650

Polybutylene Terephthalate Resin

Melt Viscosity; 1450-1850
poise

Natural Color Only

VINPOL PBT1650 is a PBT for compounding/fibers only. It is not intended for injection molding. It is FDA compliant. Its melt viscosity (@250°C/21.6 kgf) is 1,450-1,850 poise.

Resin Property	Typical Value	Units	Test Method
Melt Flow Rate, 250°C, 2.16 kgf	50	g/10 min	ASTM D-1238
Specific Gravity	1.31	g/cm ³	ASTM D-792
Mold Shrinkage, flow, 3.2mm	1.5-2	%	Supplier Method
Mold Shrinkage, xflow, 3.2mm	1.5-2	%	Supplier Method
Melt Volume Rate, 250°C/10.0kg	45	cm ³ /10 min	ISO 1133
Tensile Stress at Yield, Type I, 50mm/min	58	MPa	ASTM D-638
Tensile Strain at Yield, Type I, 50mm/min	3.7	%	ASTM D-638
Tensile Stress at Break, Type I, 50mm/min	26	MPa	ASTM D-638
Tensile Strain at Break, Type I, 50mm/min	140	%	ASTM D-638
Tensile Modulus, 5mm/min	2,600	MPa	ASTM D-638
Flexural Stress at Yield, 1.3mm/min; 50mm span	83	MPa	ASTM D-790
Flexural Modulus, 1.3mm/min; 50mm span	2,400	MPa	ASTM D-790
HDT, 0.45 MPa, 3.2mm, unannealed	120	°C	ASTM D-648
HDT, 1.82 MPa, 3.2mm, unannealed	49	°C	ASTM D-648
Vicat Softening Temp., Rate B/50	173	°C	ISO 306
Vicat Softening Temp., Rate B/120	169	°C	ISO 306
CTE, -40°C to 40°C, flow	7.6E-05	1/°C	ASTM E-831
CTE, -40°C to 40°C, xflow	7.8E-05	1/°C	ASTM E-831
Notched Izod Impact Strength, 23°C	37	J/m	ASTM D-256
Notched Izod Impact Strength, -30°C	35	J/m	ASTM D-256
Instrumented Impact Total Energy, 23°C	25	ft-lb (J)	ASTM D-3763
Water Absorption, 23°C/sat	0.34	%	ISO 62
Water Absorption, 23°C/50% RH	0.08	%	ISO 62

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