TECACOMP® PBT TC black 4207

PBT-MX — Ensinger Compounds

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**12**	cm³/10min	ISO 1133
Temperature	**280**	°C	-
Load	**5**	kg	-
Melt flow index, MFI	**19**	g/10min	ISO 1133
Temperature	**280**	°C	-
Load	**5**	kg	-
Molding shrinkage, parallel	**0.8**	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.9**	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**8500**	MPa	ISO 527
Tensile Strength	**45**	MPa	ISO 527
Strain at break	**1**	%	ISO 527
Charpy impact strength, +23°C	**8**	kJ/m²	ISO 179/1eU

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**225**	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	**60**	°C	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	**190**	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**65**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**85**	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10

Electrical properties	Value	Unit	Test Standard
Other Standards[S]			
Volume resistivity	**10000**	Ohm*m	IEC 61340-2-3
Surface resistivity	**10000**	Ohm	IEC 61340-2-3

S: These properties are reported by the producer according standards that are different to our defaults.

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.1**	%	Sim. to ISO 62
Density	**1590**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**3 - 6**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**270 - 280**	°C	-
Mold temperature	**130**	°C	-
Zone 1	**240 - 270**	°C	-

Characteristics

Processing
Injection Molding

Applications
Automotive, Electrical and Electronical

Delivery form
Pellets, Black

Regional Availability
North America, Europe, Asia Pacific, South and Central America

Special Characteristics
Increased electrical conductivity, Thermally Conductive