

Petra® 110 BK-112

Polyethylene Terephthalate

BASF Corporation

Product Description
 Petra 110 is a 15% glass fiber reinforced, black pigmented, polyethylene terephthalate injection molding compound. It exhibits a good combination of performance properties including good strength and stiffness at elevated temperatures with good chemical resistance and dimensional stability.

General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement, 15% Filler by Weight
Features	• Good Chemical Resistance • Good Stiffness • Good Dimensional Stability • Good Strength
Uses	• Automotive Applications • Gears • Machine/Mechanical Parts • Electrical Parts • Housings
Agency Ratings	• ULC Unspecified Rating
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	--	1.44 g/cm ³	ASTM D792
	--	1440 kg/m ³	ISO 1183 ²
Molding Shrinkage - Flow (3.18 mm)		0.50 %	ASTM D955

Mechanical	Nominal Value	Unit	Test Method
Tensile modulus		6680 MPa	ISO 527-2 ²
Tensile Strength			
Break, 23°C		105 MPa	ASTM D638
Break		105 MPa	ISO 527-2 ²
Tensile Elongation			
Break, 23°C		3.5 %	ASTM D638
Break		3.5 %	ISO 527-2 ²
Flexural Modulus			
23°C		5350 MPa	ASTM D790
23°C		5480 MPa	ISO 178
Flexural Strength (23°C)		145 MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength (23°C)		6.00 kJ/m ²	ISO 179/1eA ²
Notched Izod Impact			
23°C		65.0 J/m	ASTM D256
23°C		6.00 kJ/m ²	ISO 180

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa		231 °C	ISO 75-2 ²
1.8 MPa, Unannealed		208 °C	ASTM D648
1.8 MPa		192 °C	ISO 75-2 ²
Melting Temperature		245 °C	ASTM D3418 ISO 3146
CLTE			ISO 11359-2
Flow		0.000032 cm/cm/°C	
Transverse		0.000079 cm/cm/°C	

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 www.kedisujiao.com

备注：以上原料物性数据由厂家发布,我公司仅提供参考！数据如有变动，请联系原料生产厂家获知。我公司不承担任何法律责任！

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Electrical	Nominal Value	Unit	Test Method
Relative Permittivity			IEC 60250 ²
100 Hz	3.40		
1 MHz	3.30		
Dissipation Factor			IEC 60250 ²
100 Hz	100		
1 MHz	200		
Electric strength	36 kV/mm		IEC 60243-1 ²
Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (1.50 mm)	HB		UL 94
UL 746	Nominal Value	Unit	Test Method
RTI Str (1.50 mm)	140 °C		UL 746
RTI Imp (1.50 mm)	140 °C		UL 746
RTI Elec (1.50 mm)	140 °C		UL 746
Injection	Nominal Value	Unit	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.010	%	
Processing (Melt) Temp	280 to 300	°C	
Mold Temperature	100 to 110	°C	
Injection Pressure	3.50 to 12.5	MPa	
Injection Rate	Fast		

Notes

¹ Typical properties: these are not to be construed as specifications.

² Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

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