

Petra® 140 BK-112

Polyethylene Terephthalate

BASF Corporation

Product Description			
Petra 140 BK-112 is a 45% glass reinforced, pigmented black, polyethylene terephthalate (PET) injection molding compound offering an increased level of strength, stiffness, high temperature performance and dimensional stability. Resistance to creep under load is excellent and it maintains the inherent chemical and electrical properties associated with polyester.			
General			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber Reinforcement, 45% Filler by Weight		
Features	• Good Creep Resistance	• Good Stiffness	• High Heat Resistance
	• Good Dimensional Stability	• Good Strength	
Uses	• Housings	• Machine/Mechanical Parts	
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	--	1.70 g/cm ³	ASTM D792
	--	1700 kg/m ³	ISO 1183 ²
Molding Shrinkage - Flow (3.18 mm)		0.20 %	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile modulus		14600 MPa	ISO 527-2 ²
Tensile Strength			
Break, 23°C		170 MPa	ASTM D638
Break		170 MPa	ISO 527-2 ²
Tensile Elongation			
Break, 23°C		2.0 %	ASTM D638
Break		2.0 %	ISO 527-2 ²
Flexural Modulus			
23°C		12700 MPa	ASTM D790
23°C		12800 MPa	ISO 178
Flexural Strength (23°C)		278 MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength			ISO 179/1eA ²
-30°C		14.0 kJ/m ²	
23°C		11.5 kJ/m ²	
Notched Izod Impact			
23°C		90.0 J/m	ASTM D256
-40°C		11.5 kJ/m ²	ISO 180
23°C		12.0 kJ/m ²	ISO 180
Drop Impact Resistance (23°C)		1 J	Internal Method
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)		118	ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa		242 °C	ISO 75-2 ²
1.8 MPa, Unannealed		224 °C	ASTM D648
1.8 MPa		220 °C	ISO 75-2 ²
Melting Temperature		245 °C	ASTM D3418 ISO 3146
CLTE - Flow		0.000022 cm/cm/°C	ASTM E831

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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Injection	Nominal Value	Unit
Drying Temperature	120	°C
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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