

# Petra® 230 BK-112

## Polyethylene Terephthalate

### BASF Corporation

**Product Description**  
 Petra 230 BK-112 is a 35% mineral and glass fiber reinforced, black pigmented, polyethylene terephthalate injection molding compound. It exhibits a very good combination of performance properties including high strength and stiffness with ductility at elevated temperatures, good chemical resistance, dimensional stability and warp resistance.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber Reinforcement, 22% Filler by Weight	• Mineral Filler, 13% Filler by Weight	
Features	• Good Chemical Resistance • Good Creep Resistance • Good Dimensional Stability	• High Stiffness • High Strength • Low Warpage	• Paintable • Warp Resistant
Uses	• Automotive Applications • Electrical Parts	• Gears • Housings	
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1)	• Secant Modulus vs. Strain (ISO 11403-1)	• Shear Modulus vs. Temperature (ISO 11403-2)

Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.61	g/cm <sup>3</sup>	ASTM D792
--	1610	kg/m <sup>3</sup>	ISO 1183 <sup>2</sup>
Molding Shrinkage - Flow (3.18 mm)	0.30	%	ASTM D955

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-40°C	12300	MPa	ISO 527-2
80°C	4120	MPa	ISO 527-2
121°C	2590	MPa	ISO 527-2
--	11700	MPa	ISO 527-2 <sup>2</sup>
Tensile Strength			
Break, -40°C	145	MPa	ASTM D638 ISO 527-2
Break, 23°C	115	MPa	ASTM D638
Break, 80°C	60.0	MPa	ASTM D638 ISO 527-2
Break, 121°C	45.0	MPa	ASTM D638 ISO 527-2
Break	115	MPa	ISO 527-2 <sup>2</sup>
Tensile Elongation			
Break, -40°C	1.6	%	ASTM D638
Break, 23°C	2.0	%	ASTM D638
Break, 80°C	6.3	%	ASTM D638
Break, 121°C	8.1	%	ASTM D638
Break	2.0	%	ISO 527-2 <sup>2</sup>
Flexural Modulus			
23°C	9050	MPa	ASTM D790
23°C	8760	MPa	ISO 178
Flexural Strength (23°C)	180	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength			ISO 179/1eA <sup>2</sup>
-30°C	5.50	kJ/m <sup>2</sup>	
23°C	6.00	kJ/m <sup>2</sup>	
Notched Izod Impact			
23°C	55.0	J/m	ASTM D256
23°C	6.00	kJ/m <sup>2</sup>	ISO 180

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 [www.kedisujiao.com](http://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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Tuesday, December 15, 2009

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	240	°C	ISO 75-2 <sup>2</sup>
1.8 MPa, Unannealed	206	°C	ASTM D648
1.8 MPa	210	°C	ISO 75-2 <sup>2</sup>
Melting Temperature	245	°C	ASTM D3418 ISO 3146
CLTE - Flow	0.000022	cm/cm/°C	ASTM E831
Injection	Nominal Value	Unit	
Drying Temperature	120	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.020	%	
Processing (Melt) Temp	280 to 310	°C	
Mold Temperature	100 to 110	°C	
Injection Pressure	3.50 to 12.5	MPa	
Injection Rate	Fast		

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

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

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