


Bakelite® PF 8052

PF-(GF+X)

Bakelite Synthetics

Product Texts
Product description:

Phenolic moulding compound, glass fibre-reinforced and inorganically filled. Excellent heat resistance with respect to surface finish and mechanical properties.

Application areas:

High heat-resistant up to 285 °C, Baking oven rollers, cookware fittings.

Property Name	Value	Unit	Standard No.
Apparent density (moulding compound)	0.68	g/cm ³	ISO 60
Moulding shrinkage (injection moulding, longitudinal)	0.35	%	ISO 2577
Post shrinkage (injection moulding, 168h/110 °C)	0.1	%	ISO 2577
Moulding shrinkage (compression moulding, longitudinal)	0.3	%	ISO 2577
Post shrinkage (compression moulding, 168h/110 °C)	0.1	%	ISO 2577
Tensile strength (5mm/min)	55	MPa	ISO 527-1/2
Compr. strength (test spec. flat tested)	165	MPa	ISO 604
Flexural strength (2mm/min)	90	MPa	ISO 178
Flexural modulus	8500	MPa	ISO 178
Ball indentation hardness (H 961/30)	290	MPa	ISO 2039/P1
Water absorption (24h/23 °C)	15	mg	similar to ISO 62

Preparation of Test Specimens of Thermosetting Moulding Compound

- Compression to ISO 295
- Injection to ISO 10724

Storage capability

2 years (relative humidity of 50-60% and maximum storage temperature of approximately 20 °C)

Rheological properties	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Mechanical properties			
ISO Data			
Tensile Modulus	8500	MPa	ISO 527
Charpy impact strength, +23 °C	6.5	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23 °C	2	kJ/m ²	ISO 179/1eA
Thermal properties			
ISO Data			
Temp. of deflection under load, 8.00 MPa	150	°C	ISO 75-1/-2
Other properties			
ISO Data			
Density	1500	kg/m ³	ISO 1183
Test specimen production			
ISO Data			
Injection Molding, injection temperature	115	°C	ISO 10724

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Injection Molding, injection velocity	170	mm/s	ISO 10724
Injection Molding, hold pressure	100	MPa	ISO 10724
Injection Molding, cure time	25	min	ISO 10724
Compression Molding, mold temperature	160	°C	ISO 295
Compression Molding, cure time	1	min	ISO 295
Characteristics			
Processing			
Injection Molding, Transfer Molding			
Other text information			
Injection Molding			
VERARBEITUNG			
Temperature of material:	80 - 100		°C
Mould temperature:	160 - 190		°C
Curing time:	10-20		sec
Further Information:			
Barrel temperature			
- Feed zone:	60-75		°C
- Nozzle zone:	80-100		°C
Cavity moulding pressure:	>15		MPa
Back pressure:	0.5-2		MPa
Holding pressure:	60% of injection pressure		
Compression molding			
PROCESSING			
Mould temperature:	160-190		°C
Curing time:	20-40		sec
Cavity moulding pressure:	>15		MPa