Bakelite® PF 1110

PF-(GF+X) Momentive Specialty Chemicals

Product Texts

Property Name	Value	Unit	Standard No.
Apparent density (moulding compound)	1.1	g/cm³	ISO 60
Moulding shrinkage (injection moulding, longitudinal)	0.15	%	ISO 2577
Post shrinkage (injection moulding, 168h/110°C)	0.03	%	ISO 2577

Tensile strength (5mm/min) 150 MPa ISO 527-1/2 Compr. strength (test spec. flat tested) 325 MPa ISO 604 Flexural strength (2mm/min) 265 MPa ISO 178 Flexural modulus 27000 MPa ISO 178 Water absorption (24h/23°C) 7 mg similar to ISO 62 table>Additional characteristics:

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	0.1	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	29000	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	16.5	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	4.5	kJ/m²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 8.00 MPa	190	°C	ISO 75-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	7	-	IEC 60250
Dissipation factor, 100Hz	0.1	E-4	IEC 60250
Volume resistivity	1E10	Ohm*m	IEC 60093
Surface resistivity	1E11	Ohm	IEC 60093
Electric strength	28	kV/mm	IEC 60243-1
Comparative tracking index	225	-	IEC 60112

Other properties	Value	Unit	Test Standard
ISO Data			
Density	2000	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			

Injection Molding, injection temperature	115	°C	ISO 10724
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:	105-115	°C
Mould temperature:	160-180	°C
Curing time:	10-20	sec
Further Information:		
Barrel temperature		
- Feed zone:	60-75	°C
- Nozzle zone:	80-100	°C
Cavity moulding pressure: d>	>15	MPa
Back pressure:	0.5-2	MPa
Holding pressure:	60% of injection pressure	

Compression molding

PROCESSINGMould temperature:	160-190	°C
Curing time:	20-40	sec
Cavity moulding pressure:	>15	MPa