Bakelite® PF 7596

PF-(CF+X) Momentive Specialty Chemicals

Product Texts

Product description:

Phenolic moulding compound, inorganically/organically filled, modified with graphite, good heat conductivity, good sliding properties (Not suitable for use of higher voltage).

Application areas:

Bearers for grinding disc centers, gas meter parts, pump parts, sliding/guiding elements, glide bearing parts.

Property Name	Value	Unit	Standard No.
Apparent density (moulding compound)	0.72	g/cm³	ISO 60
Moulding shrinkage (injection moulding, longitudinal)	0.3	%	ISO 2577
Post shrinkage (injection moulding, 168h/110°C)	0.1	%	ISO 2577
Tensile strength (5mm/min)	65	MPa	ISO 527-1/2
Compr. strength (test spec. flat tested)	130	MPa	ISO 604
Flexural strength (2mm/min)	95	MPa	ISO 178
Flexural modulus	14000	MPa	ISO 178
Water absorption (24h/23°C)	8	mg	similar to ISO 62

Additional characteristics: T, G

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	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	16000	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	4.75	kJ/m²	ISO 179/1eU

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 8.00 MPa	175	°C	ISO 75-1/-2

Other properties	Value	Unit	Test Standard
ISO Data			
Density	1630	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:	160-190	°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

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