TECHNICAL DATA SHEET

Bakelite® PF 7595

Bakelite Synthetics
PF-(CF+X)

Processing	Injection molding, Transfer molding

Product Text

Product Information

Product description:

Phenolic moulding compound, inorganically/organically filled, modified with graphite, good heat conductivity, good sliding properties, conductive in electrical properties.

Application areas:

Modified with graphite, good heat conductivity, good sliding properties, high dimension stability, gas meter parts, fuel pump impellers, bearing parts, gas meter valves and grids.

Property Name	Value	Unit	Standard No.
Apparent density (moulding compound)	0.85	g/cm³	ISO 60
Moulding shrinkage (injection moulding, longitudinal)	0.25	%	ISO 2577
Post shrinkage (injection moulding, 168h/110°C)	0.1	%	ISO 2577
Moulding shrinkage (compression moulding, longitudinal)	0.2	%	ISO 2577
Post shrinkage (compression moulding, 168h/110°C)	0.1	%	ISO 2577
Tensile strength (5mm/min)	45	MPa	ISO 527-1/2
Compr. strength (test spec. flat tested)	130	MPa	ISO 604
Flexural strength (2mm/min)	80	MPa	ISO 178

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Flexural modulus	12000	MPa	ISO 178
Ball indentation hardness (H 961/30)	400	MPa	ISO 2039/P1
Water absorption (24h/23°C)	7	mg	similar to ISO 62

Additional characteristics: galvanize, conductive

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)

Processing/Physical Characteristics	Value	Unit	Standard
Molding shrinkage, parallel	0.25	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Standard
Tensile modulus	12000	MPa	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	4	kJ/m²	ISO 179/1eU

Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 8.00 MPa	170	°C	ISO 75-1/-2

Other Properties	Value	Unit	Standard
Density	1600	kg/m³	ISO 1183

Test Specimen Production	Value	Unit	Standard
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

Diagrams

Bakelite® PF 7595

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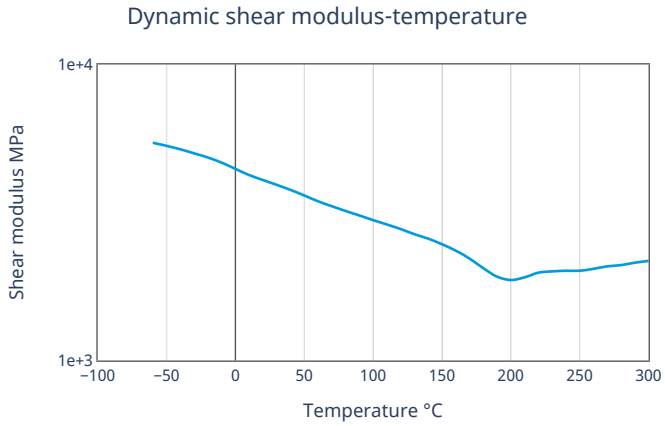

Processing Information

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