

**Bakelite® PF 2874**

PF-(GF+X)

Momentive Specialty Chemicals

**Product Texts****Product description:**

Phenolic moulding compound, inorganically filled, glass fibre reinforced, increased mechanical strength, increased temperature stability, low water absorption, good dimensional stability, UL listed moulding compound 0.75 mm / V-0 (BK).

**Application areas:**

Insulating flanges, automotive engine parts, steering housings, end plates for electrical motors, carbon brush holders, clamp boards, iron heat shield, coffee machine bases, housings for domestic appliances, bobbins, cross bars, terminal boards, switches/regulator knobs, pulleys, impellers, pump parts.

Property Name	Value	Unit	Standard No.
Apparent density (moulding compound)	0.7	g/cm <sup>3</sup>	ISO 60
Moulding shrinkage (injection moulding, longitudinal)	0.5	%	ISO 2577
Post shrinkage (injection moulding, 168h/110°C)	0.25	%	ISO 2577
Moulding shrinkage (compression moulding, longitudinal)	0.25	%	ISO 2577
Post shrinkage (compression moulding, 168h/110°C)	0.2	%	ISO 2577
Tensile strength (5mm/min)	65	MPa	ISO 527-1/2
Compr. strength (test spec. flat tested)	225	MPa	ISO 604
Flexural strength (2mm/min)	125	MPa	ISO 178
Flexural modulus	10500	MPa	ISO 178
Ball indentation hardness (H 961/30)	350	MPa	ISO 2039/P1
Water absorption (24h/23°C)	30	mg	similar to ISO 62

Additional characteristics:

D, .5, UL, HS

**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
<b>ISO Data</b>			
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>	Value	Unit	Test Standard
	Tensile Modulus	10500	MPa
	Charpy impact strength (+23°C)	9	kJ/m <sup>2</sup>
<b>ISO Data</b>	Charpy notched impact strength (+23°C)	2	kJ/m <sup>2</sup>
	<b>Thermal properties</b>		
	Temp. of deflection under load, 8.00 MPa	150	°C
<b>Electrical properties</b>			
<b>ISO Data</b>	Value	Unit	Test Standard
	Relative permittivity, 100Hz	10	-
	Dissipation factor, 100Hz	0.25	E-4
	Volume resistivity	1E10	Ohm*m
Surface resistivity			IEC 60093

**Bakelite® PF 2874**

PF-(GF+X)

Momentive Specialty Chemicals

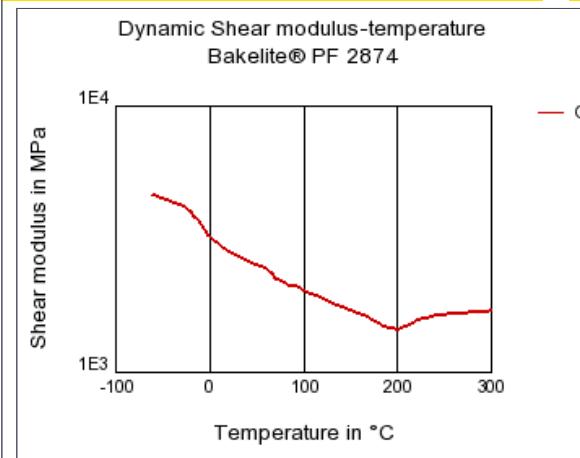
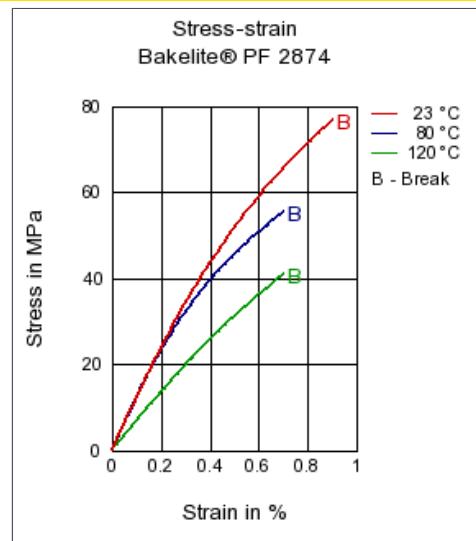
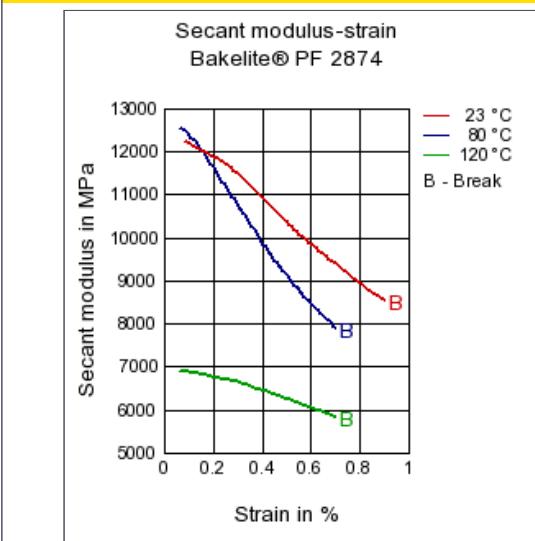
Electric strength	26	kV/mm	IEC 60243-1
Comparative tracking index	175	-	IEC 60112

**Other properties** **Value** **Unit** **Test Standard****ISO Data**

Density	1570	kg/m <sup>3</sup>	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

**Diagrams****Dynamic Shear modulus-temperature****Stress-strain****Secant modulus-strain**

**Bakelite® PF 2874**

PF-(GF+X)

Momentive Specialty Chemicals

**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