

Bakelite® PF 13591

PF-X

Momentive Specialty Chemicals

Product Texts**Product description:**

Phenolic moulding compound, mainly organically filled, very soft flow for large moulds, UL listed moulding compound 1.5 mm/ V-1 (BK), 3.0 mm/ V-0 (BK).

Application areas:

Pan handles, various applications in electrical- and automotive area.

Property Name	Value	Unit	Standard No.
Apparent density (moulding compound)	0.63	g/cm ³	ISO 60
Moulding shrinkage (compression moulding, longitudinal)	0.65	%	ISO 2577
Post shrinkage (compression moulding, 168h/110°C)	0.65	%	ISO 2577
Flexural strength (2mm/min)	90	MPa	ISO 178
Flexural modulus	7000	MPa	ISO 178
Water absorption (24h/23°C)	75	mg	similar to ISO 62

Additional characteristics:

A, UL

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)

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Charpy impact strength (+23°C)	6	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	1.3	kJ/m ²	ISO 179/1eA
Thermal properties			
ISO Data			
Temp. of deflection under load, 8.00 MPa	110	°C	ISO 75-1-2
Electrical properties			
ISO Data			
Relative permittivity, 100Hz	15	-	IEC 60250
Dissipation factor, 100Hz	0.3	E-4	IEC 60250
Volume resistivity	1E9	Ohm*m	IEC 60093
Surface resistivity	1E10	Ohm	IEC 60093
Electric strength	16	kV/mm	IEC 60243-1
Other properties			
ISO Data			
Density	1410	kg/m ³	ISO 1183
Test specimen production			
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

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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		