

Bakelite® PF 4136

Phenolic

Hexion Inc.

Message:

Product Description

Phenolic moulding compound, inorganically filled, glass fibre reinforced, ammonia and acetic acid free, electrically high grade, high temperature stability, low shrinkage, high mechanical strength

Application Areas

Commutators, wind screen wipers, adjustment motors, washing machine motors, vacuum cleaners, kitchen devices, electrical tools

General Information			
Filler / Reinforcement	Glass Fiber		
	Inorganic		
Features	Good Dimensional Stability		
	Good Thermal Stability		
	High Heat Resistance		
	High Strength		
	Low Shrinkage		
Uses	Appliance Components		
	Power/Other Tools		
Processing Method	Compression Molding		
	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.83	g/cm ³	ISO 1183
Apparent Density	0.80	g/cm ³	ISO 60
Molding Shrinkage ¹	0.15	%	ISO 2577
Water Absorption - 24h/23C	10.0	mg	ISO 62
Post Shrinkage ²	0.10	%	ISO 2577
Compression Molding Molding Pressure	> 15.0	MPa	
Compression Molding Temperature	160 to 190	°C	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	13000	MPa	ISO 527-2/1
Tensile Stress	70.0	MPa	ISO 527-2/5
Flexural Modulus	15500	MPa	ISO 178
Flexural Stress ³	135	MPa	ISO 178
Compressive Stress	250	MPa	ISO 604
Impact	Nominal Value	Unit	Test Method

Charpy Notched Impact Strength (23°C)	3.5	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	9.5	kJ/m ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (8.0 MPa, Unannealed)	165	°C	ISO 75-2/C
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+11	ohms	IEC 60093
Volume Resistivity	1.0E+12	ohms·cm	IEC 60093
Electric Strength ⁴ (1.00 mm)	33	kV/mm	IEC 60243-1
Relative Permittivity (100 Hz)	7.50		IEC 60250
Dissipation Factor (100 Hz)	0.050		IEC 60250
Comparative Tracking Index (Solution A)	225	V	IEC 60112
Injection	Nominal Value	Unit	
Rear Temperature	60.0 to 75.0	°C	
Nozzle Temperature	80.0 to 100	°C	
Processing (Melt) Temp	80.0 to 100	°C	
Mold Temperature	160 to 190	°C	
Injection Pressure	> 15.0	MPa	
Back Pressure	0.500 to 2.00	MPa	
NOTE			
1.	Compression		
2.	Compression		
3.	2.0 mm/min		
4.	short term, electrode layout P25mm/P25mm in transformer oil equivalent to IEC 60296		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

