Durez® 118 (Compression)

Phenolic

Sumitomo Bakelite North America, Inc.

Message:

Durez 118 Black Phenolic is a two-stage, general purpose molding material. It exhibits improved impact strength and resistance to flexural fatigue for demanding automotive, electrical and appliance applications. Shrinkage and mechanical strengths are closely controlled to meet part reliability requirements.

General Information	
Features	Impact resistance, good Fatigue resistance General
Uses	Electrical/Electronic Applications Electrical appliances Application in Automobile Field
Appearance	Black
Forms	Particles
Processing Method	Resin transfer molding Compression molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.40	g/cm³	ASTM D792
Apparent Density	0.58	g/cm³	ASTM D1895
Molding Shrinkage - Flow	0.70	%	ASTM D6289
Water Absorption	0.50	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	9600	MPa	ASTM D638
Tensile Strength	55.0	MPa	ASTM D638
Flexural Strength	76.0	MPa	ASTM D790
Compressive Strength	207	MPa	ASTM D695
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	18	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed)	171	°C	ASTM D648
RTI Elec (3.00 mm)	150	°C	UL 746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+13	ohms·cm	ASTM D257
Dielectric Strength			ASTM D149

-- [1]	16	kV/mm	ASTM D149
-- [2]	14	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	4.70		ASTM D2520
Dissipation Factor (1 MHz)	0.050		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
1.50 mm	HB		UL 94
3.00 mm	V-1		UL 94
6.00 mm	V-0		UL 94
Thermoset	**Nominal Value**	**Unit**	
Shelf Life	52	wk	
Additional Information			
Test Specimens Molded at 340-350°FTypical transfer-molded shrinkage is 0.009 in/in			
NOTE			
1.	Method A (short time)		
2.	Method B (step by step)		

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