

# Durez® 32245 (Compression)

Phenolic

Sumitomo Bakelite North America, Inc.

## Message:

Durez 32245 Black Phenolic is a two-stage glass fiber and mineral filled special purpose molding compound. It is especially designed for applications requiring high strength and dimensional stability with excellent heat resistance. Typical applications include heavy duty switch gear, connectors, and commutators.

General Information	
Filler / Reinforcement	Glass fiber reinforced material Mineral filler
Features	Good dimensional stability High strength Heat resistance, high
Uses	Gear Switch Connector
Appearance	Black
Forms	Particles
Processing Method	Resin transfer molding Compression molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.80	g/cm <sup>3</sup>	ASTM D792
Apparent Density	0.85	g/cm <sup>3</sup>	ASTM D1895
Molding Shrinkage - Flow	0.25	%	ASTM D6289
Water Absorption	0.050	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	17200	MPa	ASTM D638
Tensile Strength	69.0	MPa	ASTM D638
Flexural Strength	103	MPa	ASTM D790
Compressive Strength	241	MPa	ASTM D695
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	37	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	204	°C	ASTM D648
RTI Elec (3.00 mm)	180	°C	UL 746

Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+12	ohms·cm	ASTM D257
Dielectric Strength			ASTM D149
-- <sup>1</sup>	18	kV/mm	ASTM D149
-- <sup>2</sup>	14	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	4.90		ASTM D2520
Dissipation Factor (1 MHz)	0.020		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.50 mm	V-0		UL 94
3.00 mm	V-0		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°F Post Bake Properties - 8 hrs at 350°F			
NOTE			
1.	Method A (short time)		
2.	Method B (step by step)		

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#### Recommended distributors for this material

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