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NEW PRODUCT DATA SHEET

'BAKELITE' PHENOLIC MOLDING MATERIAL

BMMA-5715 Black 25

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Description: BMMA-5715 Black 25 is a two step medium impact material having a good balance of physical and electrical properties combined with fast cure and good molding latitude.

PROPERTY	SPECIMEN	TESTING METHOD	UNIT	VALUE Avg.
Specific Gravity	...	D792	...	1.36
Bulk Factor	...	D392	...	2.5
Pourability	...	D792	seconds	-
Molding Shrinkage	1/8 x 4 in. disk	D955	inch/inch	0.006
Izod Impact Strength	1/2x1/2x2-1/2 in.	D256	ft. lb./in. notch	0.39
Tensile Strength	1/8 in. specimen	D651	psi	7000
Flexural Strength	1/4x1/2x5 in.	D790	psi	9500
Modulus of Elasticity in Flexure	1/4x1/2x5 in.	D790	psi	-
Compressive Strength	1/2x1/2x1 in.	D695	psi	38000
Dielectric Strength, Short Time	1/8x4 in. disk	D149	volts/mil	305
Volume Resistivity	1/8x4 in. disk	D257	ohm-cm.	1.2×10^{13}
Dielectric Constant, 60_3 cycles	1/8x4 in. disk	D150	...	5.9
10^6 cycles	1/8x4 in. disk	D150	...	5.4
10^8 cycles	1/8x4 in. disk	D150	...	4.3
Dissipation Factor, 60_3 cycles	1/8x4 in. disk	D150	...	0.069
10^6 cycles	1/8x4 in. disk	D150	...	0.044
10^8 cycles	1/8x4 in. disk	D150	...	0.038
Deflection Temp. at 264 psi	1/2x1/2x6 in.	D648	deg. F.	-
Water Absorption, gain in weight	1/8x2 in. disk	D570	per cent	0.32

Granulation	12 mesh
Plasticity	Grades Available: 6,9,12
Tabletting Quality	Can be tabletted with the usual equipment.
Heat Resistance	Exposure to temperatures in excess of 300°F. ordinarily is not recommended but higher temperatures may be withstood if exposures are not prolonged. Trial under expected service conditions is advisable and it is suggested that heat resistance requirements be discussed with a Union Carbide Plastics Company Representative since the effects of elevated temperatures vary for different properties.

See opposite side for definitions and packaging instructions.

THE RECOMMENDATIONS, TEST RESULTS, PROPERTY VALUES, AND SUGGESTIONS ARE OFFERED HEREIN AS A GUIDE IN THE USE OF THESE MATERIALS AND ARE NOT A GUARANTEE OF THEIR PERFORMANCE. THE PROPERTY VALUES GIVEN ARE THOSE TO BE EXPECTED IN THE PRODUCT AT THE TIME OF MANUFACTURE. THESE VALUES ARE DEPENDENT UPON USING THE TESTING METHODS AS INDICATED. PROPERTIES MORE CERTAIN TO BE REALIZED ARE MEASURED WITH LESSER FREQUENCY THAN OTHERS AS IS USUAL WHERE MANUFACTURING OPERATIONS ARE CLOSELY CONTROLLED. IF APPLICATIONS REQUIRE CONTINUAL VERIFICATION OF A CERTAIN PROPERTY OR PROPERTIES, REQUIREMENTS SHOULD BE DISCUSSED WITH A UNION CARBIDE DIVISION TECHNICAL REPRESENTATIVE.

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