PLAINTIFF'S EXHIBIT

UC-5311

For Use of
F.W. Ducca
E A Schmittberger
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Bldg 91
6/8/56

BAKELITE
BRAND

Plastics
MOLDING MATERIALS

PURCHASER'S GUIDE

No. 4993
is registered for the
personal use of

Mr. F. G. Clark

BAKELITE COMPANY
A DIVISION OF UNION CARBIDE AND CARBON CORPORATION
UCC
30 EAST 42nd ST., NEW YORK 17, N. Y.

INTRODUCTION

This "Purchaser's Guide" is designed primarily to afford the average plastics user a convenient and comprehensive survey of the principal BAKELITE Brand molding materials, and to facilitate his selection of the most suitable material on the basis of data derived from standard tests.

In the belief that "typical" property values most accurately characterize the material and, at the same time, permit the most convenient comparison, we have used such values throughout. It should be noted that the typical values listed are intended only to indicate the average performance of a material as based on extensive laboratory tests and are not a guarantee of its performance. A brief description of the test methods used is given in the pages immediately following under the heading "Definitions of Molding Materials Properties."

Before making a final decision on a particular molding material for any application, each user must determine for himself that this material fulfills all of his design and production requirements. Minimum and maximum product specification values are available and will be furnished upon request.

The publication of information in this book shall not be construed as a license or inducement to practice any patented invention.

NOTE ON NOMENCLATURE

Used in "Purchaser's Guide"

For your convenience in identifying BAKELITE Brand materials, a new descriptive nomenclature system has been instituted and is used in this "Purchaser's Guide," together with the old designation of each product. A full explanation of the new system is contained in the "Nomenclature" section of this book.

In order to enable the user to familiarize himself with the new product designations, a transition period, extending through April 30, 1956, has been established for all materials except those listed below.

In the case of the following materials, it has been found that the old designation is in wide use in customer and Government specifications. For this reason, therefore, the designation shown in the "Present Nomenclature" column will apply until further notice. The proposed new designation for these materials will not become effective in the immediate future unless modifications of these materials or further development work dictate a change.

Present Nomenclature	Proposed New Nomenclature
BM-120 Black	BMG-5120 Black 25
Brown	Brown 35
BM-2498 Black	BMG-5498 Black 25
BM-6260 Black	BMG-2051 Black 35
BM-7156 Black	BMG-2156 Black 15
BM-13080 Black	BMG-2080 Black 25
BM-13335 Black	BMG-8335 Black 35
BM-14316 Black	BMG-8316 Black 25
BM-15140 Black	BMG-8140 Black 15
BM-16981 Natural	BMG-0981 Natural
BM-17748 Natural	BMG-0748 Natural

DEFINITIONS OF MOLDING MATERIALS PROPERTIES

Definitions of the properties described in the following data sheets are given below and, when applicable, the test designation of the American Society for Testing Materials (prefaced by the letter D) or the identifying number of the Bakelite Company test method (prefaced by the letters WC). Details of the Bakelite Company test methods will be furnished on request.

1. **Plasticity Grade**—A number (i.e. 4, 6, 9, 12, 15, 18, and 21) assigned to a molding material indicating its flow properties. Increasing grade designations denote materials of softer flow. These values, although not exactly equivalent, are correlated with the Flow Range Designations formerly used (i.e. 40, 60, 90, 120, 150).

2. **Bulk Factor** (D392)—The ratio of the volume which a given quantity of loose molding powder occupies to the volume which the same quantity occupies after molding.

3. **Molding Shrinkage** (D955)—The difference, per unit of length, between the cooled molded piece and the cold mold, expressed in inches per inch. The shrinkage values published herein have been derived by the standard testing methods identified and may be compared with other shrinkage values similarly obtained. However, it must be recognized, that shrinkage varies with mold design and molding conditions. Therefore, the published values may not accurately predict the shrinkage which will occur in any given application.

4. **Dielectric Strength** (D149)—The maximum potential gradient which a given test specimen can withstand without rupture. The test values listed herein were obtained from short-time or instantaneous dielectric strength tests made by increasing the applied voltage continuously at a specified rate until rupture occurs.

5. **Volume Resistivity** (D257)—The ratio of applied voltage to current flowing between two electrodes covering opposite faces of a centimeter cube as calculated from measurements made on a given specimen of other geometric shape.

6. **Dielectric Constant** (D150)—The ratio of the equivalent parallel capacitance, measured at a specified frequency, of a capacitor in which the material is the dielectric to the capacitance of the same capacitor with a vacuum (or air) as the dielectric.

7. **Dissipation Factor** (D150)—A measure of the loss of energy to the material when it is the dielectric in a capacitor in an alternating electrical field.

8. **Water Absorption** (D570)—The quantity of water absorbed by a given test specimen after immersion for a period of 24 hours at 23 deg. C. Water absorption is determined by the per cent gain in weight of the test specimen.

9. **Saturation Constant** (WC-78)—The maximum amount of water which can be absorbed by a specimen expressed as per cent gain in weight.

10. **Diffusion Constant** (WC-78)—A measure of the rate at which water is absorbed by a specimen.

11. **Izod Impact Strength** (D256)—An indication of the susceptibility to fracture by shock as determined by measuring the mechanical energy required to break a standard notched specimen with a single blow. Izod Impact Strength is expressed in ft-lb/inch of notch.

12. **Compressive Strength** (D695)—The compressive stress, calculated in pounds per square inch, required to cause failure of a given test specimen.

13. **Tensile Strength** (D651)—The tensile stress or pull, calculated in pounds per square inch, required to break a given test specimen.

14. **Flexural Strength** (D790)—The maximum fiber stress, in pounds per square inch, sustained by a given test specimen, calculated from the bending load required to break it.

15. **Modulus of Elasticity** (D790)—The ratio of unit stress to unit strain within the range where stress and strain are proportional.

16. **Ultimate Elongation** (D638)—The elongation, or extension, of a specimen, recorded at the moment of rupture. This property is expressed as a percentage of the original length of the specimen.

17. **Specific Gravity** (D792)—The ratio of the weight of a given volume of a material at 23 deg. C. (73.4 deg. F.) to that of an equal volume of water at the same temperature.

18. **Specific Heat**—The amount of heat, in calories, required to raise one gram of a substance one deg. C.

19. **Heat of Combustion**—The heat evolved, in calories, during the complete combustion of one gram of material.

20. **Coefficient of Linear Thermal Expansion** (D696)—The ratio of the change in length of a specimen per degree, to its length at 0 deg. C.

21. **Brittle Temperature** (D746)—The lowest temperature at which 50 per cent of the test specimens exposed to a specified impact do not fail. Modifications of this test procedure are often used to determine the lowest temperature at which no failure or 80 per cent non-failure is obtained.

22. **Soluble Matter Lost** (D570)—The percentage loss in weight determined by weighing a dry specimen before and after immersion in water for 24 hours.

23. **Volatility Loss** (D1203)—A measure of the loss of volatile matter from a plastic material during its immersion in activated carbon in a constant temperature oven for 24 hours. This property is expressed as a percentage weight loss.

24. **Rockwell Hardness** (D785)—Hardness determined by measuring, during a short period of contact, the resistance to indentation of a material by a spherical penetrator under a specified load.

25. **Durometer Hardness** (D676)—The hardness of a specimen as determined by the degree to which it can be indented under constant load by an indentor of fixed dimensions. (This is an arbitrary measurement dependent upon the particular load and the indentor selected.)



District Sales Offices

Atlanta 3, Ga. . . . . 133 Luckie Street
Boston 94, Mass. . . . . 300 First Avenue, Needham Hgts.
Chicago 1, Ill. . . . . 230 No. Michigan Avenue
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Cleveland 14, Ohio . . . . . 1300 Lakeside Avenue, N. E.
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Rochester 4, N. Y. . . . . 130 Main Street, East
St. Louis 22, Mo. . . . . 122 No. Kirkwood Road
San Francisco 6, Calif. . . . . 22 Battery Street

Outside Continental U. S., Hawaii and Canada
PLASTICS DEPARTMENT
Union Carbide International Company
A Division of Union Carbide and Carbon Corporation
30 East 42nd Street, New York 17, New York, U.S.A.
Cable Address: UNICARBIDE

J-900—March, 1956 Printed in U.S.A.

PRICE LISTS

GENERAL—The following data apply to all BAKELITE Brand molding materials.

All prices are subject to change—Terms: Net

Prices are based on delivery within the continental limits of the United States exclusive of Alaska. Method of shipment at Sellers option. If Buyer requests method of transportation other than the least expensive method, Buyer shall reimburse Seller for additional transportation expense involved.

Please direct orders to: Bakelite Company, P. O. Box 344, New York 8, N. Y. Orders emanating from New Mexico, Montana, Wyoming, California, Oregon, Washington, Nevada, Utah, Arizona and Idaho should be directed to: Bakelite Company, 2770 Leonis Boulevard, Los Angeles 58, Calif.

Truckload quantity subject to published Motor Carrier Minimum Net Weight.

SPECIAL—The following data apply to specific types of material:

STYRENE—Minimum Order:

All standard materials and colors—50 lb.
Made to order materials and colors:

RMD-4511; TMD-2155; TMD-5151—50 lb.
SMD-3500 and SMD-3000—1000 lb.

Prices are based on shipment packaged in Multiwall paper bags having a net content of 50 pounds. When drums are specified, 200-pound containers would normally be used at an additional charge of one-half cent per pound above bag price. An additional charge of five cents per pound will be made on orders for less than standard container quantities.

POLYETHYLENE—Minimum billing for single shipment—$10.

All shipments shall be made in Multiwall paper bags conforming to Consolidated Freight Classification Specifications and having a net content of 50 pounds.

An additional charge of five cents per pound will be made on orders for less than standard bag quantities.

VINYLS—Minimum billing for single shipment—$10.

All shipments are packaged in paper bags having net content of 50 lb.

Extra charge of five cents per pound will be made on orders for less than standardized packaging.

PHENOLICS—Minimum billing for single shipment—$10.

Where compounds are supplied in drums only, prices shown in the following schedules are based on standard drum packaging.

Where compounds are supplied in bags as well as in drums, prices shown in the following schedules are based on 50-pound bag packaging. On request, such compounds will be shipped in standard drums at an additional charge of one-half cent per pound.

Orders will be filled to the nearest standard container weight. If material is required in quantities less than that required to fill a standard container, such quantity will be billed at the less-than-standard container price.

BAKELITE COMPANY
A Division of Union Carbide and Carbon Corporation, 30 East 42nd Street, N.Y.17, N.Y.

J-900—March, 1956 Printed in U.S.A.

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"BAKELITE" PHENOLIC MOLDING MATERIALS PRICE SCHEDULE

STANDARD — 1.1 Issued March, 1956

NEW DESIG.	OLD DESIG.	Max. Spec. Grav.	Flas. Grades	DESCRIPTION	PRICE PER POUND PER SHIPMENT IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER		
					Less Std. Cont.	Std. Cont. to Trkld.	Trkld. and Over
GENERAL PURPOSE							
BM-120	BM-120		6, 9, 12	Premium quality; improved impact; excellent machinability.	.3450	.2400	.2350
Black	Black	1.36					
Brown	Brown	1.40					
BMG-0425	BM-18425	1.36	6, 9, 12, 15	Improved electrical properties.	.3150	.2100	.2050
Black 25	Black						
BMG-2010*							
Navy 45	BM-6523 Blue	1.46	4, 6, 9, 12, 15	One-step; minimum odor; fast curing; general-purpose colors.	.3975	.2925	.2875
Blue 45	BM-6558 Blue	1.56			.4400	.3350	.3300
Gray 65	BM-8712 Gray	1.48			.3900	.2850	.2800
Red 95	BM-8758 Red	1.46			.4250	.3200	.3150
Gray 75	BM-12972 Gray	1.49			.4100	.3050	.3000
Green 65	BM-15169 Green	1.38			.4125	.3075	.3025
BMG-2154	BM-15154	1.42	4, 6, 9, 12, 15	One-step; minimum odor; fast curing; suitable for closures.	.3050	.2000	.1950
Brown 25	Brown						
BMG-2323	BM-12323	1.39	4, 6, 9	One step; minimum odor; rapid cure; suitable for closures.	.3050	.2000	.1950
Black 15	Black						

*This material, in a variety of colors, is available in a plunger molding compound.
For further information consult the local Bakelite Company representative.

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"BAKELITE" PHENOLIC MOLDING MATERIALS PRICE SCHEDULE

1.2 Issued March, 1956

STANDARD

NEW DESIG.	OLD DESIG.	Max. Spec. Grav.	Plas. Grades	DESCRIPTION	PRICE PER POUND PER SHIPMENT IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER		
					Less Std. Cont.	Std. Cont. to Trkld.	Trkld. and Over
General Purpose (Continued)							
BM-2498 Black	BM-2498 Black	1.45	6, 9, 12, 15, 18	Similar to BMG-5000 Black 25 with higher specific gravity and faster cure in thick sections (particularly in the range 320-345 deg. F.).	.3020	.1970	.1920
BMG-5000 Black 25 Brown 15		1.36 1.39	4, 6, 9, 12, 15, 18	Extremely versatile; fast curing, particularly in 345-375 deg. F. range; wide molding latitude.	.3050	.2000	.1950
BMG-5200 Black 25	BM-3200 Black	1.37	6, 9, 12, 15, 18	Well balanced properties; permits accurate control of cure time in thick sections and deep draws.	.3050	.2000	.1950
BMG-5780 Mahog. 18	BM-780 Mahog. Mottle	1.38	6, 9, 12, 15, 18	Long flow and ease of release.	.3150	.2100	.2050
Walnut 18	BM-14660 Walnut Mottle	1.38	6, 9, 12, 15, 18		.3150	.2100	.2050
Maroon 55	BM-709 Red	1.37	6, 9, 12, 15, 18		.3350	.2300	.2250
BMG-7750 Black 25	BM-18750 Black	1.36	6, 9, 12, 15	Very fast cure (particularly in the range 310-330 deg. F.); excellent rigidity on discharge.	.3050	.2000	.1950

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"BAKELITE" PHENOLIC MOLDING MATERIALS PRICE SCHEDULE

1.3 Issued March, 1956

STANDARD

NEW DESIG.	OLD DESIG.	Max. Spec. Grav.	Plas. Grades	DESCRIPTION	PRICE PER POUND PER SHIPMENT IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER		
					Less Std. Cont.	Std. Cont. to Trkld.	Trkld. and Over
General Purpose *(Continued)*							
BMGA-8006* Black 25		1.41	6, 9, 12	Improved electrical properties (notably high Q-factor).	.3100	.2050	.2000
BM-14316 Black	BM-14316 Black	1.35	6, 9, 12, 15, 18	Long flow and ease of release.	.3050	.2000	.1950
BM-15140 Black	BM-15140 Black	1.37	6, 9, 12, 15	Fast curing; for compression molding; non-bleeding; used extensively for bottle caps.	.3050	.2000	.1950
IMPACT-RESISTANT							
BMG-5315 Black 25	BM-12315 Black	1.37	6, 9, 12, 15, 18	Two-step; impact strength comparable to BM-6260 Black; good moisture resistance.	.3600	.2550	.2500
BMG-5316 Black 25	BMQ-12316 Black	1.37	6, 9, 12, 15	Two-step; excellent impact strength (comparable to BM-13080 Black); good moisture resistance.	.3800	.2750	.2700

*Packed in drums only.

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"BAKELITE" PHENOLIC MOLDING MATERIALS PRICE SCHEDULE

1.4 Issued March, 1956

STANDARD

NEW DESIG.	OLD DESIG.	Max. Spec. Grav.	Plas. Grades	DESCRIPTION	PRICE PER POUND PER SHIPMENT IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER		
					Less Std. Cont.	Std. Cont. to Trkld.	Trkld. and Over
Impact-Resistant (Continued)							
BM-6260 Black	BM-6260 Black	1.37	6, 9, 12, 15	One-step; improved impact strength; similar in moldability and appearance to general-purpose materials; fast cure; minimum odor.	.3550	.2500	.2450
BM-13080 Black	BM-13080 Black	1.39	9, 12, 15, 18	One-step; higher impact than BM-6260; good moisture resistance under prolonged immersion; minimum odor; fast cure.	.3800	.2750	.2700
ELECTRICAL INSULATING							
BM-16981* Natural	BM-16981 Natural	1.92	6, 9, 12, 15	Mineral filled with optimum electrical properties.	.4150	.3100	.3050
BM-17748* Natural	BM-17748 Natural	1.75	6, 9, 12, 15	Mineral filled; good molding properties (easier molding than BM-16981 Natural); good electrical properties under humid conditions.	.4150	.3100	.3050

*Packed in drums only.

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"BAKELITE" PHENOLIC MOLDING MATERIALS PRICE SCHEDULE

1.5 Issued March, 1956

STANDARD

NEW DESIG.	OLD DESIG.	Max. Spec. Grav.	Plas. Grades	DESCRIPTION	PRICE PER POUND PER SHIPMENT IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER		
					Less Std. Cont.	Std. Cont. to Trkld.	Trkld. and Over
HEAT-RESISTANT							
BMG-0336 Black 35	BM-18336 Black	1.60	15, 18, 21	Mineral filled; soft flow (suitable for transfer, plunger or long draw compression molding).	.3050	.2000	.1950
BM-13335 Black	BM-13335 Black	1.61	6, 9, 12, 15	Mineral filled; excellent heat resistance; outstanding color retention and high surface gloss.	.3050	.2000	.1950
CHEMICAL-RESISTANT							
BMG-2095* Black 15	BM-15095 Black	1.39	4, 6, 9, 12, 15	Good chemical resistance; improved strength on discharge; will not bleed in common organic solvents.	.3550	.2500	.2450
BM-7156* Black	BM-7156 Black	1.47	4, 6, 9, 12, 15	Exceptional chemical resistance; will not bleed in common organic solvents.	.4050	.3000	.2950

*Packed in drums only.

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"BAKELITE" VINYL MOLDING MATERIALS PRICE SCHEDULE

2.1 Issued 12 April, 1956

STANDARD

NEW DESIG.	OLD DESIG.	Aver. Spec. Grav.	DESCRIPTION	PRICE PER POUND PER SHIPMENT IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER			
				Up to 199 lb.	200 to 4,999 lb.	5,000 lb. to Trkld.	Trkld. and over
VND-9734 Natural Black 45	VG-7734 Natural Black 02	1.34	Low-cost highly-filled compound; low gloss; 60 Durometer on Shore "A" scale.	.515	.355	.31	.28
VND-9960 Red 235	VG-9960 Red 01	1.35	General-purpose high-gloss compound; 60 Durometer on Shore "A" scale; polyvinyl chloride-acetate copolymer base.	.57	.41	.365	.335
VND-9970 (Standard	VG-9970 Colors)*	1.35**	70 Durometer version of VND-9960.	.57	.41	.365	.335
VND-9980	VG-9980		80 Durometer version of VND-9960.	.57	.41	.365	.335
Brown 195	Brown 10	1.35					
Pink 175	Pink 15	1.35					
Red 235	Red 01	1.39					

*Standard Colors: Old —Blue 37 Brown 10 Pink 15 Red 01
New—Blue 495 Brown 195 Pink 175 Red 235

**Varies slightly with color.

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"BAKELITE" VINYL MOLDING MATERIALS PRICE SCHEDULE

2.2 Issued March, 1956

MADE TO ORDER

NEW DESIG.	OLD DESIG.	Aver. Spec. Grav.	DESCRIPTION	PRICE PER POUND PER SHIPMENT OF SINGLE COMPOUND, SINGLE COLOR IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER				
				Up to 199 lb.	200 to 1,999 lb.	2,000 to 9,999 lb.	10,000 to Trkld.	Trkld. and over
QND-5568 (Made to	QG-5568 order colors)*	1.25**	Premium quality non-rigid compound; excellent mold fill-out; high gloss; excellent physical properties (68 Durometer on Shore "A" scale).	.875	.675	.575	.51	.465
QND-5590 Natural (Made to	QG-9590 Natural order colors)*	1.39	General-purpose high-gloss 90 Durometer compound with improved moldability.	.775	.575	.475	.41	.365
VNDA-9061 Natural (Made to	order colors)*	1.36	Medium-gloss, low-cost compound; (65 Durometer on Shore "A" scale).	.70	.50	.40	.335	.29

*Consult the local Bakelite Company representative.
**Varies slightly with color.

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"BAKELITE" VINYL MOLDING MATERIALS PRICE SCHEDULE

2.3 Issued March, 1956

MADE TO ORDER

NEW DESIG.	OLD DESIG.	Aver. Spec. Grav.	DESCRIPTION	PRICE PER POUND PER SHIPMENT OF SINGLE COMPOUND, SINGLE COLOR IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER				
				Up to 199 lb.	200 to 1,999 lb.	2,000 to 9,999 lb.	10,000 to Trkld.	Trkld. and over
VNDA-9938 (Made to	VGNA-59938 order colors)*	1.32**	Resinous plasticized compound of non-migratory type (60 Durometer on Shore "A" scale).	.90	.70	.60	.535	.49
VND-9950 Natural (Made to	VG-9950 Natural order colors)*	1.30	General-purpose high-gloss compound; 50 Durometer on Shore "A" scale; polyvinyl chloride-acetate copolymer base.	.725	.525	.425	.36	.315

*Consult the local Bakelite Company representative.
**Varies slightly with color.

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"BAKELITE" POLYSTYRENE MOLDING MATERIALS PRICE SCHEDULE

3.1 Issued 12 April, 1956

STANDARD

NEW DESIG.	OLD DESIG.	DESCRIPTION	PRICE PER POUND PER SHIPMENT IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER				
			50 to 5,999 lb.	6,000 to 19,999 lb.	20,000 to 39,999 lb.	40,000 to 79,999 lb.	80,000 lb. and over
STYRENE							
RMD-4511 Natural 11; Clear 11 Standard Colors*	BMC-11-01 Nat. B-1; Ice B-87	Styrene-acrylonitrile copolymer; chemical-resistant; superior strength properties.	.435 .475	.425 .465	.42 .46	.41 .44	.405 .435
SMD-3000 Crystal 11 Standard Colors*		High heat distortion point polystyrene.	.325 .365	.315 .355	.31 .35	.31 .34	.305 .335
SMD-3500 Crystal 11 Standard Colors*		General-purpose polystyrene; free-flowing fast setup.	.325 .365	.315 .355	.31 .35	.31 .34	.305 .335
TMD-2155 Natural 15; Black 75 Standard Colors*		Rubber-modified polystyrene; extra high-impact strength.	.415 .445	.405 .435	.385 .425	.385 .415	.38 .41
TMD-5151 Natural 15; Black 75 Standard Colors*		Rubber-modified polystyrene; high-impact strength; high gloss.	.355 .395	.345 .385	.335 .375	.335 .365	.33 .36

*Standard Colors (Over)

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STANDARD COLORS — STYRENE

Old and New Designations

Following are the standard colors available in each of the three types of styrene (SMD, TMD, and RMD). It will be noted that the designation of a given color under the new nomenclature system is the same for all styrene types, although a particular color may not be available in all three types. The old color designation listed in parentheses may be used during the transition period (through April 30, 1956).

SMD Type	RMD (C-11 Type)	TMD Type
Black 15 (A-16)	Black 15 (B-109)	•
Blue 31 (A-3)	•	X
Blue 35 (125)	Blue 35 (385)	•
Blue 595 (135)	•	•
Blue 605 (145)	•	•
•	•	Blue 615 (45)
Brown 155 (A-15)	•	•
•	•	Green 95
Green 805 (85)	Green 805 (65)	•
Green 861 (41)	•	X
Ivory 355 (105)	•	•
•	•	Ivory 195
Maroon 185 (A-18)	•	•
Pink 95 (A-9)	•	•
•	•	Red 25
•	Red 45 (B-74)	•
Red 175 (A-17)	•	•
Red 301 (51)	•	X
White 75 (A-7)	•	•
White 195 (A-19)	•	White 195 (15)
•	White 325 (25)	•
White 375 (65)	•	•
•	•	Yellow 65
Yellow 115 (A-11)	Yellow 115 (25)	•
Yellow 361 (41)	•	X

*Consult the local Bakelite Company representative on availability of made-to-order colors in this styrene type.

X Color not available in this styrene type.

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"BAKELITE" POLYSTYRENE MOLDING MATERIALS PRICE SCHEDULE

3.2 Issued 12 April, 1956

MADE TO ORDER

DESIGNATION	PRICE PER POUND PER SHIPMENT SINGLE COMPOUND SINGLE COLOR IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER								
	50 to 599	600 to 999	1000 to 1999	2000 to 5999	6000 to 9999	10,000 to 19,999	20,000 to 39,999	40,000 to 79,999	80,000 and over
RMD-4511 (Made to order colors)*	.995	.735	.635	.525	.48	.465	.46	.44	.435
SMD-3000 (Made to order colors)*	—	—	.535	.425	.38	.365	.35	.34	.335
SMD-3500 (Made to order colors)*	—	—	.535	.425	.38	.365	.35	.34	.335
TMD-2155 (Made to order colors)*	1.015	.71	.61	.50	.455	.44	.425	.415	.41
TMD-5151 (Made to order colors)*	1.015	.66	.56	.45	.405	.39	.375	.365	.36

*Consult the local Bakelite Company representative

BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N. Y.

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"BAKELITE" POLYETHYLENE RESINS PRICE SCHEDULE

STANDARD

4.1 Issued March, 1956

DESIGNATION	Aver. Spec. Grav.	DESCRIPTION	PRICE PER POUND PER SHIPMENT IN STANDARDIZED CONTAINER AGAINST SINGLE ORDER			
			Up to 199 lb.	200 to 9,999 lb.	10,000 to 19,999 lb.	20,000 lb. and over
DYLT	0.92	Special very low molecular weight (melt index ca. 200); improved flexibility; low strength; potting material.	.59	.44	.425	.41
DYNF	0.92	General-purpose medium molecular weight (melt index 2.5-3.6); very fast molding.	.59	.43	.42	.41
DYNH	0.92	General-purpose medium molecular weight (melt index 1.5-2.4); moderate flexibility; wide molding latitude.	.59	.43	.42	.41
DYNJ	0.92	Special high molecular weight (melt index 0.53-0.99); improved rigidity; stiffer molding; lower gloss.	.61	.46	.445	.43
DXM-103	0.92	General-purpose; high-melt index (18-24); excellent rigidity; fast molding; high gloss; good mold fill-out; particularly recommended for large pieces.	.59	.43	.42	.41

BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N. Y.

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BAKELITE MOLDING MATERIALS

BM-120
Black · Brown
(BMG-5120 Black 25; Brown 35)*
General-Purpose
Two-Step
Phenolic

DESCRIPTION

BM-120 is a general-purpose two-step phenolic molding material of premium quality. BM-120 offers improved impact strength over most general-purpose materials and is noteworthy for its excellent machinability. Its medium fast rate of hardening, good molded appearance, good electrical properties, and well-balanced combination of physical properties make it suitable for a wide variety of applications. This material is pourable and easily tabletted.

TYPICAL PROPERTIES

1 Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.6
Plasticity Grades Available	6, 9, 12
Molding Shrinkage, in./in. (D955-51)	0.005

2 Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			370
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	5.7	5.3	4.7
Dissipation Factor (D150-54T)	0.07	0.04	0.03

3 Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.32
Compressive Strength (D695-54), psi	34,000
Tensile Strength (D651-48) (⅛ in.), psi	8400
Flexural Strength (D790-49T), psi	10,000
Modulus of Elasticity in Flexure (D790-49T), psi	10×10^5

4 Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	
Black 25	1.34
Brown 35	1.37
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	330
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.4
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	2.0×10^{-5}

*See Nomenclature note on front page.

BAKELITE MOLDING MATERIALS

BMG-0425
Black 25
(formerly BM-16425 Black)
General-Purpose Two-Step Phenolic

DESCRIPTION

BMG-0425 Black 25 is a two-step general-purpose phenolic molding material of improved electrical insulating qualities. Higher volume resistivity and insulation resistance, together with improved resistance to dielectric fatigue, have distinguished it as a superior material for automobile ignition components and similar electrical parts. BMG-0425 is a medium-fast curing material suitable for use in most types of molds and under conditions normally used for general-purpose materials.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.4
Plasticity Grades Available	4, 6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength, (D149-55T) Short time, volts/mil			340
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{13}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	5.7	5.3	4.7
Dissipation Factor (D150-54T)	0.06	0.03	0.04

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	29,000
Tensile Strength (D651-48) (⅛ in.), psi	7200
Flexural Strength (D790-49T), psi	9300
Modulus of Elasticity in Flexure (D790-49T), psi	8.4×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.34
Heat Distortion Temp., deg. F. (D648-45T) (½ in.–264 psi)	300
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.6
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	2.0×10^{-6}

BAKELITE MOLDING MATERIALS

BMG-2010
Standard Colors
(See Price Schedule)
General-Purpose
One-Step
Phenolic

DESCRIPTION

BMG-2010 is a general-purpose one-step phenolic molding material available in a variety of colors (standard colors are listed in price schedule; for made-to-order colors consult local Bakelite Company representative). The rapid cure speed of this material makes it particularly suitable for use in automatic equipment. Although BMG-2010 is not ordinarily attacked by organic solvents, some colors may bleed slightly; this factor should be investigated under intended conditions of use. In common with other one-step materials, BMG-2010 is free from ammonia odor. It should also be noted that colored phenolic materials are subject to darkening after prolonged exposure to sunlight. This material has found wide use in closures and comparable articles. A similar material, BMG-2910, is available for use in plunger molding equipment.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.3
Plasticity Grades Available	4, 6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	.0065

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			300
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{13}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	7.0	6.0	5.5
Dissipation Factor (D150-54T)	0.06	0.03	0.04

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	28,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	8500
Modulus of Elasticity in Flexure (D790-49T), psi	9×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.45 (Varies with color)
Heat Distortion Temp., deg. F. (D648-45T) (½ in.–264 psi)	315
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.5
Saturation Constant (WC-78-B-2), per cent	7
Diffusion Constant (WC-78-E), $cm^2/hr.$	3.5×10^{-5}

BAKELITE MOLDING MATERIALS

BMG-2154
Brown 25
(formerly BM-15154 Brown)
General-Purpose One-Step Phenolic

DESCRIPTION

BMG-2154 Brown 25 is a general-purpose one-step phenolic molding material, having minimum odor characteristics, rapid cure rate, and resistance to bleeding in organic solvents. It is widely used in the molding of closures, but is suited, by virtue of its properties, to a wide variety of other uses. Its excellent cure speed has led to its general use in automatic equipment.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.3
Plasticity Grades Available	4, 6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			290
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{13}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	7.0	6.4	5.5
Dissipation Factor (D150-54T)	0.04	0.03	0.045

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	30,000
Tensile Strength (D651-48) (⅛ in.), psi	7000
Flexural Strength (D790-49T), psi	9000
Modulus of Elasticity in Flexure (D790-49T), psi	9×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.39
Heat Distortion Temp., deg. F. (D648-45T) (½ in.–264 psi)	315
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.6
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	3.0×10^{-5}

BAKELITE MOLDING MATERIALS

BMG-2323
Black 15
(formerly BM-12323 Black)
General-Purpose One-Step Phenolic

DESCRIPTION

BMG-2323 Black 15 is a general-purpose one-step phenolic molding material. Minimum odor, good torque strength, and rapid cure recommend BMG-2323 Black 15 for the molding of closures, particularly in automatic equipment. It is also suggested for other applications in which freedom from ammonia odor and resistance to bleeding in organic solvents are desirable.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.3
Plasticity Grades Available	4, 6, 9
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			290
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{13}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	7.0	6.4	5.5
Dissipation Factor (D150-54T)	0.04	0.03	0.045

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	30,000
Tensile Strength (D651-48) (⅛ in.), psi	7000
Flexural Strength (D790-49T), psi	9000
Modulus of Elasticity in Flexure (D790-49T), psi	9×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.37
Heat Distortion Temp., deg. F. (D648-45T) (½ in.–264 psi)	315
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.8
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	3.0×10^{-5}

BAKELITE MOLDING MATERIALS

BM-2498
Black
(BMG-5498 Black 25)*
General-Purpose Two-Step Phenolic

DESCRIPTION

BM-2498 Black is a general-purpose two-step wood-flour and mineral-filled material exhibiting particularly excellent cure properties in the lower molding temperature ranges (320-345 deg. F.). This material offers a relatively well-balanced combination of molded properties and in particular displays low moisture absorption, improved dimensional stability, and rapid cure in thick sections. BM-2498 is easily molded under standard molding conditions —gives pieces having a smooth, glossy surface. Tabletting qualities and pourability are good.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.4
Plasticity Grades Available	6, 9, 12, 15, 18
Molding Shrinkage, in./in. (D955-51)	0.005

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			340
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	5.7	5.3	4.7
Dissipation Factor (D150-54T)	0.07	0.04	0.03

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	32,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9300
Modulus of Elasticity in Flexure (D790-49T), psi	9.5×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.42
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	300
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.4
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	2×10^{-5}

*See Nomenclature note on front page.

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BAKELITE MOLDING MATERIALS

BMG-5000
Black 25
Brown 15
General-Purpose Two-Step Phenolic

DESCRIPTION

BMG-5000 is a general-purpose two-step wood-flour filled material possessing the best combination of molding and end use properties. Offering a very low specific gravity, broad molding latitude, excellent flow properties, and good hot rigidity, BMG-5000 can be molded on minimum cycle (particularly in the range 345-375 deg. F.) to produce pieces of high gloss and superior strength properties. Tabletting and pourability are good. This material is ideally suited for applications requiring good gloss, excellent appearance, low shrinkage, minimum warpage, and good electrical properties.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.4
Plasticity Grades Available	4, 6, 9, 12, 15, 18
Molding Shrinkage, in./in. (D955-51)	0.005

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			370
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	5.7	5.3	4.6
Dissipation Factor (D150-54T)	0.07	0.04	0.03

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.30
Compressive Strength (D695-54), psi	34,000
Tensile Strength (D651-48) (¼ in.), psi	8400
Flexural Strength (D790-49T), psi	10,000
Modulus of Elasticity in Flexure (D790-49T), psi	10×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	
Black 25	1.34
Brown 15	1.36
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	330
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.45
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	1.3×10^{-5}

BAKELITE MOLDING MATERIALS

BMG-5200
Black 25
(formerly BM-3200 Black)
General-Purpose Two-Step Phenolic

DESCRIPTION

BMG-5200 Black 25 is a two-step general-purpose phenolic molding material possessing a combination of properties which make it suitable for a variety of applications where a slower curing material is desired. BMG-5200 Black 25 can be molded well in most types of molds and under the conditions normally used for general-purpose materials. Its long flow properties permit accurate control of cure time on thick sections and deep draw pieces or where molding pressures available are lower than those generally used.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.4
Plasticity Grades Available	6, 9, 12, 15, 18
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			340
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	5.7	5.3	4.7
Dissipation Factor (D150-54T)	0.07	0.04	0.03

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	32,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9300
Modulus of Elasticity in Flexure (D790-49T), psi	9.5×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.36
Heat Distortion Temp., deg. F. (D648-45T) (¼ in.—264 psi)	300
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.4
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	2.0×10^{-5}

BAKELITE MOLDING MATERIALS

BMG-5780
Mahogany 18
Maroon 55; Walnut 18
(formerly BM-780 Mahogany Mottle; BM-709 Red; BM-14660 Walnut Mottle)

DESCRIPTION

BMG-5780 is a general-purpose two-step phenolic molding material, available in mahogany mottle, walnut mottle, and maroon. Long flow and ease of release recommend BMG-5780 for deep draw moldings such as cabinets and cases where its attractive colors and patterns are particularly suitable. BMG-5780 can be molded readily in most types of molds and under conditions normally used for general-purpose materials.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.3
Plasticity Grades Available	6, 9, 12, 15, 18
Molding Shrinkage, in./in. (D955-51)	0.007

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			340
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	5.7	5.3	4.7
Dissipation Factor (D150-54T)	0.07	0.04	0.03

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	32,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9300
Modulus of Elasticity in Flexure (D790-49T), psi	9.5×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.36
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	300
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.4
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	2.0×10^{-5}

BAKELITE MOLDING MATERIALS

BMG-7750
Black 25
(formerly BM-18750 Black)
General-Purpose Two-Step Phenolic

7750

DESCRIPTION

BMG-7750 Black 25 is a two-step general-purpose phenolic molding material. It combines unusually fast cure particularly at low molding temperatures (in the range of 310-330 deg. F.) and excellent rigidity at discharge. Because of its rapid cure, it has somewhat less molding latitude than other general-purpose phenolic molding materials. BMG-7750 Black 25 can be molded with the equipment and under the conditions normally used for general-purpose phenolics, but is suggested for those particular operations permitting full utilization of its fast cure at low temperatures.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.4
Plasticity Grades Available	6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.005

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			340
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	5.7	5.3	4.7
Dissipation Factor (D150-54T)	0.07	0.04	0.03

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	32,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9300
Modulus of Elasticity in Flexure (D790-49T), psi	9.5×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.34
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	300
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.5
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	3.0×10^{-5}

BAKELITE MOLDING MATERIALS

BMGA-8006
Black 25
General-Purpose
Two-Step
Phenolic

DESCRIPTION

BMGA-8006 Black 25 is a general-purpose two-step phenolic molding material possessing excellent electrical properties, in combination with a rapid rate of cure and good surface gloss. The insulation resistance of this material, in particular its high Q-factor, have led to its use in electronic tube bases and similar high-frequency applications. BMGA-8006 has also been found to exhibit excellent retention of electrical properties under high humidity conditions.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.4
Plasticity Grades Available	6, 9, 12
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			380
Volume Resistivity, ohm-cm. (D257-54T)			5×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	5.7	5.3	4.4
Dissipation Factor (D150-54T)	0.08	0.04	0.03

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	32,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	10,000
Modulus of Elasticity in Flexure (D790-49T), psi	10×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.41
Heat Distortion Temp., deg. F. (D648-45T) (½ in.–264 psi)	315
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.3
Saturation Constant (WC-78-B-2), per cent	6.5
Diffusion Constant (WC-78-E), $cm^2/hr.$	1.0×10^{-5}

BAKELITE MOLDING MATERIALS

BM-14316
Black
(BMG-8316 Black 25)*
General-Purpose Two-Step Phenolic

DESCRIPTION

BM-14316 Black is a two-step general-purpose wood-flour filled material which, because of its extra-long flow and ease of release, is particularly suitable for deep draw moldings such as cabinets and cases. This material has been used successfully in molds where the taper proved insufficient for other phenolic molding materials. While not as fast curing as other general-purpose materials, it has a very wide molding latitude and may be used in slower operating equipment without the loss of plasticity.

The data on the reverse side of this page are designed to afford the average plastics user a convenient tabulation of the typical properties of a BAKELITE Brand molding material.

In the belief that "typical" property values most accurately characterize compositions, at the same time, permit the most convenient comparison with other molding materials, such values have been used herein. It should be noted that these typical values are intended only to indicate the average performance of the material as based on extensive laboratory tests and are not a guarantee of its performance. Information on these standard tests may be obtained upon request.

Before making a final decision on a particular molding material for any application, each user must determine for himself that this material fulfills all of his design and production requirements. Minimum and maximum product specification values are available and will be furnished upon request.

TYPICAL PROPERTIES

Values Relating to Fabrication	
Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.4
Plasticity Grades Available	6, 9, 12, 15, 18
Molding Shrinkage, in./in. (D955-51)	0.006
Values from Electrical Tests	
Dielectric Strength (D149-55T) Short time, volts/mil	340
Volume Resistivity, ohm-cm. (D257-54T)	1×10^{12}
60 c.	1 kc. 1 mc.
Dielectric Constant (D150-54T)	5.7 5.3 4.7
Dissipation Factor (D150-54T)	0.07 0.04 0.03
Values from Mechanical Tests	
Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	32,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9300
Modulus of Elasticity in Flexure (D790-49T), psi	9.5×10^5
Values from Miscellaneous Tests	
Molded Specific Gravity (D792-50)	1.33
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	300
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.5
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	2.0×10^{-5}

*See Nomenclature note on front page.

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BAKELITE MOLDING MATERIALS

BM-14316
Black
(BMG-8316 Black 25)*
General-Purpose Two-Step Phenolic

DESCRIPTION

BM-14316 Black is a two-step general-purpose wood-flour filled material which, because of its extra-long flow and ease of release, is particularly suitable for deep draw moldings such as cabinets and cases. This material has been used successfully in molds where the taper proved insufficient for other phenolic molding materials. While not as fast curing as other general-purpose materials, it has a very wide molding latitude and may be used in slower operating equipment without loss of plasticity.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.4
Plasticity Grades Available	6, 9, 12, 15, 18
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil	340
Volume Resistivity, ohm-cm. (D257-54T)	1×10^{12}

	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	5.7	5.3	4.7
Dissipation Factor (D150-54T)	0.07	0.04	0.03

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	32,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9300
Modulus of Elasticity in Flexure (D790-49T), psi	9.5×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.33
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	300
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.5
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	2.0×10^{-5}

*See Nomenclature note on front page.

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BAKELITE MOLDING MATERIALS

BM-15140
Black
(BMG-8140 Black 15)*
General-Purpose Two-Step Phenolic

DESCRIPTION

BM-15140 Black is a two-step general-purpose wood-flour filled material having a very fast rate of cure at low molding temperatures and excellent rigidity at discharge. BM-15140 is a non-bleeding material, particularly suited for automatic compression molding of such small pieces as buttons. It has also been used with success in larger pieces and in applications requiring painting. It is not normally recommended for transfer or plunger molding applications.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.4
Plasticity Grades Available	6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			290
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	7.0	6.4	5.5
Dissipation Factor (D150-54T)	0.08	0.05	0.04

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.28
Compressive Strength (D695-54), psi	30,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9000
Modulus of Elasticity in Flexure (D790-49T), psi	9.5×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.35
Heat Distortion Temp., deg. F. (D648-45T) (½ in.–264 psi)	315
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.4
Saturation Constant (WC-78-B-2), per cent	8
Diffusion Constant (WC-78-E), $cm^2/hr.$	2.0×10^{-3}

*See Nomenclature note on front page.

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BAKELITE MOLDING MATERIALS

BMG-5315
Black 25
(formerly BM-12315 Black)
Impact-Resistant Two-Step Phenolic

DESCRIPTION

BMG-5315 Black 25 is a two-step phenolic molding material having improved impact strength and excellent resistance to water and solutions of soaps and detergents, even at elevated temperatures. BMG-5315 Black 25 is widely used in the molding of washing machine agitators and similar applications. This material offers advantages in cost, bulk factor, and preformability over BMG-5316 Black 25 but is lower in impact strength.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	6 mesh
Bulk Factor (D392-38)	2.6
Plasticity Grades Available	6, 9, 12, 15, 18
Molding Shrinkage, in./in. (D955-51)	0.004

Values from Electrical Tests

Dielectric Strength, (D149-55T) Short time, volts/mil			280
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	10.5	7.5	5.0
Dissipation Factor (D150-54T)	0.21	0.16	0.05

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.37
Compressive Strength (D695-54), psi	28,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9000
Modulus of Elasticity in Flexure (D790-49T), psi	9×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.36
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	315
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.4
Saturation Constant (WC-78-B-2), per cent	5.5
Diffusion Constant (WC-78-E), $cm^2/hr.$	2×10^{-5}
Soap Resistance (% gain in weight)	2.2

BAKELITE
MOLDING MATERIALS

BMG-5316
Black 25
(formerly BM-12315)
Impact-Resistant
Two-Step
Phenolic

DESCRIPTION

BMG-5316 Black 25 is a two-step phenolic molding material with high-impact strength and excellent resistance to water and to solutions of soaps and detergents, even at elevated temperatures. These properties make BMG-5316 Black 25 particularly suitable for washing machine agitators, dishwashers, and similar parts where mild alkaline or acid solutions may be encountered. Because of its two-step composition, this material has greater molding latitude and better mold release than one-step washing machine agitator compounds.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	6 mesh
Bulk Factor (D392-38)	3.2
Plasticity Grades Available	6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.004

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			280
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	10.0	7.0	5.0
Dissipation Factor (D150-54T)	0.21	0.16	0.05

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.48
Compressive Strength (D695-54), psi	28,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9000
Modulus of Elasticity in Flexure (D790-49T), psi	9×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.37
Heat Distortion Temp., deg. F. (D648-45T) (¼ in.—264 psi)	315
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.5
Saturation Constant (WC-78-B-2), per cent	5.5
Diffusion Constant (WC-78-E), $cm^2/hr.$	2×10^{-5}
Soap Resistance (% gain in weight)	2.6

BAKELITE MOLDING MATERIALS

BM-6260
Black
(BMG-2051
Black 35)*
Impact-Resistant
One-Step
Phenolic

DESCRIPTION

BM-6260 Black is a one-step phenolic molding material having improved impact strength and good moisture resistance, properties which make it well suited for molded parts requiring increased strength. Its minimum odor, fast rate of cure, and low specific gravity recommend BM-6260 Black for a wide variety of applications.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	12 mesh
Bulk Factor (D392-38)	2.5
Plasticity Grades Available	6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength (D149-55T), Short time, volts/mil			280
Volume Resistivity, ohm-cm. (257-54T)			5×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	7.5	6.8	5.8
Dissipation Factor (D150-54T)	0.10	0.05	0.04

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.37
Compressive Strength (D695-54), psi	28,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	8500
Modulus of Elasticity in Flexure (D790-49T), psi	9×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.36
Heat Distortion Temp., deg. F. (D648-45T) (½ in.-264 psi)	315
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.6
Saturation Constant (WC-78-B-2), per cent	6.4
Diffusion Constant (WC-78-E), $cm^2/hr.$	3×10^{-3}

*See Nomenclature note on front page.

BAKELITE MOLDING MATERIALS

BM-13080
Black
(BMG-2080 Black 25)*
Impact-Resistant One-Step Phenolic

DESCRIPTION

BM-13080 Black is a one-step phenolic molding material with high-impact strength and superior resistance to moisture. Its ability to withstand solutions of soaps and detergents at elevated temperatures and its performance in applications where one side of the molding remains wet while the other side is dry, recommend it for use in washing machine agitators, sterilizers, pumps and other similar applications. BM-13080 also offers the advantages of a one-step material—minimum odor characteristics and a rapid rate of cure.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	6 mesh
Bulk Factor (D392-38)	3.0
Plasticity Grades Available	9, 12, 15, 18
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			280
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	11.0	8.0	6.0
Dissipation Factor (D150-54T)	0.21	0.16	0.05

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.48
Compressive Strength (D695-54), psi	28,000
Tensile Strength (D651-48) (⅛ in.), psi	7500
Flexural Strength (D790-49T), psi	9000
Modulus of Elasticity in Flexure (D790-49T), psi	8.5×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.37
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	315
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.4
Saturation Constant (WC-78-B-2), per cent	4.8
Diffusion Constant (WC-78-E), $cm^2/hr.$	3×10^{-5}
Soap Resistance (% gain in weight)	2.1

*See Nomenclature note on front page.

BAKELITE MOLDING MATERIALS

BM-16981
Natural
(BMG-0981 Natural)*
Electrical Insulating
Phenolic

DESCRIPTION

BM-16981 Natural is a mineral-filled phenolic molding material offering the optimum in electrical insulating properties particularly at high frequencies. It is highly resistant to moisture and is dimensionally stable. BM-16981 Natural is ideally suited for most electrical applications including coil forms, vacuum tube bases, condenser housings, and resistors. For applications requiring a freer flowing electrical compound, BM-17748 is recommended.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.3
Plasticity Grades Available	6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.003

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			385
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{13}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	4.9	4.7	4.5
Dissipation Factor (D150-54T)	0.018	0.016	0.006

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.34
Compressive Strength (D695-54), psi	25,000
Tensile Strength (D651-48) (⅛ in.), psi	7000
Flexural Strength (D790-49T), psi	9500
Modulus of Elasticity in Flexure (D790-49T), psi	28×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.90
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	275
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.01
Saturation Constant (WC-78-B-2), per cent	1.1
Diffusion Constant (WC-78-E), $cm^2/hr.$	1×10^{-5}

*See Nomenclature note on front page.

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BAKELITE MOLDING MATERIALS

BM-17748
Natural
(BMG-0748 Natural)*
Electrical Insulating
Two-Step
Phenolic

DESCRIPTION

BM-17748 Natural is a mineral-filled phenolic molding material possessing excellent electrical insulating properties. Its improved molding characteristics make it suitable for either compression or transfer molding. It exhibits good dimensional stability and resistance to moisture. Tabletting qualities and pourability are good. BM-17748 is particularly recommended for such applications as coil forms, vacuum tube bases, condenser housings and resistors.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.2
Plasticity Grades Available	6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.004

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			385
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{13}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	4.9	4.7	4.5
Dissipation Factor (D150-54T)	0.020	0.018	0.008.

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.34
Compressive Strength (D695-54), psi	25,000
Tensile Strength (D651-48) (⅛ in.), psi	7000
Flexural Strength (D790-49T), psi	9500
Modulus of Elasticity in Flexure (D790-49T), psi	22×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.72
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	285
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.03
Saturation Constant (WC-78-B-2), per cent	1.1
Diffusion Constant (WC-78-E), $cm^2/hr.$	1×10^{-5}

*See Nomenclature note on front page.

BAKELITE MOLDING MATERIALS

BMG-0336
Black 35
(formerly BM-18336 Black)
Heat-Resistant Two-Step Phenolic

DESCRIPTION

BMG-0336 Black 35 is a mineral-filled two-step phenolic molding material combining good heat resistance with a relatively low specific gravity. This material is capable of withstanding temperatures in the range of 400-450 deg. F. for short periods of time and temperatures up to 350 deg. F. for much longer periods. Soft flow makes BMG-0336 Black 35 particularly suitable for transfer or plunger molding or for long-draw compression molding. In its physical properties, BMG-0336 Black 35 is very similar to BM-13335 Black; however, because of its soft flow, its heat resistance is somewhat lower.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	12 mesh
Bulk Factor (D392-38)	2.1
Plasticity Grades Available	15, 18, 21
Molding Shrinkage, in./in. (D955-51)	0.004

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			150
Volume Resistivity, ohm-cm. (D257-54T)			5×10^{11}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	20.0	13.0	8.0
Dissipation Factor (D150-54T)	0.25	0.20	0.08

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.30
Compressive Strength (D695-54), psi	28,000
Tensile Strength (D651-48) (⅛ in.), psi	5000
Flexural Strength (D790-49T), psi	7000
Modulus of Elasticity in Flexure (D790-49T), psi	12×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.58
Heat Distortion Temp., deg. F. (D648-45T) (¼ in.—264 psi)	340
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.2
Saturation Constant (WC-78-B-2), per cent	3
Diffusion Constant (WC-78-E), $cm^2/hr.$	1.5×10^{-3}

BAKELITE MOLDING MATERIALS

BM-13335
Black
(BMG-8335 Black 35)*
Heat-Resistant Two-Step Phenolic

DESCRIPTION

BM-13335 Black is a mineral-filled, two-step phenolic molding material of relatively low specific gravity, possessing exceptionally good heat resistance. This material can withstand temperatures as high as 500 deg. F. for short periods of time and temperatures up to 400 deg. F. for much longer periods. BM-13335 produces pieces of high surface gloss exhibiting outstanding color retention after exposure to high temperatures. These properties have gained it wide acceptance for such applications as utensil handles and components for heating appliances.

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	12 mesh
Bulk Factor (D392-38)	2.1
Plasticity Grades Available	6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.004

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			150
Volume Resistivity, ohm-cm. (D257-54T)			5×10^{11}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	20.0	13.0	8.0
Dissipation Factor (D150-54T)	0.25	0.20	0.08

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.30
Compressive Strength (D695-54), psi	28,000
Tensile Strength (D651-48) (¼ in.), psi	5000
Flexural Strength (D790-49T), psi	7000
Modulus of Elasticity in Flexure (D790-49T), psi	12×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.58
Heat Distortion Temp., deg. F. (D648-45T) (¼ in.—264 psi)	340
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.2
Saturation Constant (WC-78-B-2), per cent	3
Diffusion Constant (WC-78-E), $cm^2/hr.$	1.5×10^{-3}

*See Nomenclature note on front page.

BAKELITE MOLDING MATERIALS

BMG-2095
Black 15
(formerly BM-15095 Black)
Chemical-Resistant One-Step Phenolic

DESCRIPTION

BMG-2095 Black 15 is a one-step, cellulose-filled material having good chemical resistance and minimum odor. It will not bleed in most organic solvents. BMG-2095 can be molded with about the same facility as general-purpose materials and is similar to the latter in molded appearance. (Should greater chemical resistance be desired BM-7156 Black is recommended).

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.6
Plasticity Grades Available	4, 6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.006

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			225
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{12}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	22.0	13.0	7.0
Dissipation Factor (D150-54T)	0.30	0.25	0.06

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.25
Compressive Strength (D695-54), psi	34,000
Tensile Strength (D651-48) (⅛ in.), psi	7000
Flexural Strength (D790-49T), psi	7500
Modulus of Elasticity in Flexure (D790-49T), psi	8×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.37
Heat Distortion Temp., deg. F. (D648-45T)	
(⅛ in.—264 psi)	340
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.4
Saturation Constant (WC-78-B-2), per cent	3.5
Diffusion Constant (WC-78-E), $cm^2/hr.$	7×10^{-5}

BAKELITE MOLDING MATERIALS

BM-7156
Black
(BMG-2156 Black 15)*
Chemical-Resistant One-Step Phenolic

DESCRIPTION

BM-7156 Black is a chemical-resistant one-step phenolic molding material having high resin content. It is a minimum odor material and will not bleed in common organic solvents. BM-7156 Black can be molded with about the same facility as general-purpose materials and exhibits an excellent surface appearance when molded. (When mold design necessitates a material with improved strength on discharge, chemical-resistant BMG-2095 Black 15 is recommended.)

TYPICAL PROPERTIES

Values Relating to Fabrication

Granulation (D392-38)	16 mesh
Bulk Factor (D392-38)	2.2
Plasticity Grades Available	4, 6, 9, 12, 15
Molding Shrinkage, in./in. (D955-51)	0.007

Values from Electrical Tests

Dielectric Strength (D149-55T) Short time, volts/mil			275
Volume Resistivity, ohm-cm. (D257-54T)			1×10^{13}
	60 c.	1 kc.	1 mc.
Dielectric Constant (D150-54T)	13.0	9.0	6.0
Dissipation Factor (D150-54T)	0.18	0.12	0.06

Values from Mechanical Tests

Izod Impact Strength (D256-54T) ft-lb/inch of notch	0.25
Compressive Strength (D695-54), psi	30,000
Tensile Strength (D651-48) (⅛ in.), psi	6800
Flexural Strength (D790-49T), psi	8000
Modulus of Elasticity in Flexure (D790-49T), psi	8.5×10^5

Values from Miscellaneous Tests

Molded Specific Gravity (D392-38)	1.45
Heat Distortion Temp., deg. F. (D648-45T) (½ in.—264 psi)	325
Moisture Sensitivity:	
Water Absorption (D570-54T), per cent wt. gain	0.4
Saturation Constant (WC-78-B-2), per cent	3.5
Diffusion Constant (WC-78-E), $cm^2/hr.$	5×10^{-6}

*See Nomenclature note on front page.

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EXPLANATION OF NEW NOMENCLATURE

As Used In "Purchaser's Guide"

Recently, Bakelite Company instituted a unified nomenclature system utilizing a series of three letters and four numbers to designate the various BAKELITE Brand products and to afford a general description of each. The letter designation of a compound, under the new system, indicates its basic chemical composition (phenolic, polyethylene, vinyl, etc.), the customer processing medium for which it was manufactured (molding, extrusion, etc.), and the form in which the material is sold (diced, granular, etc.). A fourth letter used in a few designations indicates that the compound is experimental. This letter will be dropped when a product becomes commercially available.

Since the "Purchaser's Guide" employs this system (in conjunction with the former designation), a brief explanation of the symbols, as they apply to molding materials, is included herewith.

FIRST LETTER—Indicates the basic chemical composition.

B—Phenolic

D—Polyethylene

F—Fluorothene

G—Silicones

Q—Polyvinyl Chloride

R—Styrene Copolymers

S—Styrene (unmodified)

T—Styrene—Rubber modified

V—Vinyl Chloride-Acetate

SECOND LETTER—Indicates the intended customer processing method.

M—Molding, Rigid

N—Molding, Non-Rigid

THIRD LETTER—Indicates the form in which the material is sold.

D—Diced or Pellets

F—Dry Coloring Particles

G—Standard Granulation

M—Special Pulverized Particle or Granulation

P—Standard Pulverized Particle

Z—Miscellaneous—other than above, or combination, or mixture of above.

The numbered portion of the compound designation is used to identify a specific compound. Where the product is furnished in colors, a color name and its identifying number follow the primary product designation.

EXAMPLE: BMG-5000

B—Phenolic

M—Molding Material, Rigid

G—Standard Granulation

NOTE: The foregoing explanation does not apply to those materials designated herein as resins.

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