# BAKELITE®

UNION CARBIDE

## PHENOLIC MOLDING MATERIALS

BMMA-5138
Black-25
Heat Resistant

### DESCRIPTION

BMMA-5138 Black-25 is a two-step phenolic material with low specific gravity for a heat resistant material, designed for utensils and appliance parts where exposure to elevated temperatures is required. Additional heat resistance data are available from a UNION CARBIDE Technical Representative. BMMA-5138 Black-25 is designed specifically for powder molding, but may also be preformed.

BMMA-5138 Black-25 meets the requirements of ASTM Specification D 700, Type 13.

NEW PRODUCT DATA

# BAKELITE®

UNION CARBIDE

## PHENOLIC MOLDING MATERIALS

BMMA-5353
Black-25 DC
Heat Resistan

### DESCRIPTION

BMMA-5353 Black-25 DC is a two-step mineral filled compou formulated for appliance and automotive parts requiring a h smooth surface combined with excellent dimensional stabil and heat resistance. Its fast cure and low mold shrinkage w minimize the need for shrink fixtures where warpage can be problem

PROPERTIES ...

# BAKELITE®

UNION CARBIDE

## PHENOLIC MOLDING MATERIALS

BMRS-2035
Black-25 DC
Heat Resistant

### DESCRIPTION

BMRS-2035 Black-25 DC is a one-step* mineral-filled phenolic material recommended for iron handles and other appliance parts requiring a combination of heat resistance and good wet/dry performance.

BMRS-2035 Black-25 DC meets ASTM Specification D 700, Type 13.

# BAKELITE®

UNION CARBIDE

## PHENOLIC MOLDING MATERIALS

BMRS-5303
Black-25 DC
Heat Resistant

### DESCRIPTION

BMRS-5303 Black-25 DC is a completely reformulated injection molding grade of the two-step heat resistant type. Has excellent heat resistance coupled with superior dimensional stability at a medium molded density. Also has good barrel life and fast cures. Particularly recommended for under-the-hood automotive parts and appliance parts requiring good steam crack resistance.

BMRS-5303 Black-25 DC has been granted UL "Yellow Card" component recognition for use at temperatures not exceeding 150°C. in thicknesses no less than 1 16-inch. It also has an SE-0 flammability rating and an arc resistance rating of 180 seconds.

BMRS-5303 Black-25 DC will meet the requirements of ASTM Specification D 700 for Type 13.

PROPERTIES ...

# BAKELITE®

UNION CARBIDE

## PHENOLIC MOLDING MATERIALS

BMMC-2035
Black-25
Heat Resistant

### DESCRIPTION

BMMC-2035 Black-25 is a one-step* mineral-filled phenolic material recommended for iron handles and other appliance parts requiring a combination of heat resistance and good wet/dry performance.

BMMC-2035 Black-25 meets ASTM Specification D 700, Type 13.

### PROPERTIES

| | |
|---|---|
| **FABRICATION** | |
| Plasticity Grades Available | 15 |
| Bulk Factor (D 392) | 2.4, max. |
| Molding Shrinkage (D 955), inch/inch | 0.0045 |
| **MECHANICAL** | |
| Izod Impact Strength (D 256), ft.-lb./in. notch | 0.36 |
| Compressive Strength (D 695), psi. | 28,000 |
| Tensile Strength (D 651), psi. | 6,000 |
| Flexural Strength (D 790), psi. | 7,500 |
| Modulus of Elasticity in Flexure | $10 \times 10^5$ |
| **ELECTRICAL** | |
| Dielectric Strength, Short Time (D 149), volts/mil | 340 |
| Volume Resistivity (D 257), ohm-cm. | $5 \times 10^{13}$ |

| | 60Hz | 1MHz |
|---|---|---|
| Dielectric Constant (D 150) | 10 | 6 |
| Dissipation Factor (D 150) | 0.15 | 0.06 |

| | |
|---|---|
| **MISCELLANEOUS** | |
| Molded Specific Gravity (D 792) | 1.48–1 |
| Deflection Temp. at 264 psi, (D 648), °F. | 340 |
| Water Absorption, gain in weight (D 570), per cent | 0.40 |

* To maintain rated plasticity at time of manufacture one-step phenolic materials should not be stored longer than three months, unless under refrigeration.

PLAINTIFF'S EXHIBIT
UC-5306

# BAKELITE®

UNION CARBIDE

## PHENOLIC MOLDING MATERIALS

BMMD-5303
Black-25 DC
Heat Resistant

### DESCRIPTION

BMMD-5303 Black-25 DC is a low-dust two-step material formulate for appliance and electrical insulation parts requiring heat resistanc and good dimensional stability. It is especially recommended for me chanical automotive applications.

BMMD-5303 Black-25 DC has been granted UL "Yellow Card" com ponent recognition for use at temperatures not exceeding 150°C. i thicknesses no less than 1.16-inch. It also has an SE-0 flammabilit rating and an arc resistance rating of 180 seconds.

BMMD-5303 Black-25 DC will meet the requirements of ASTM Spec fication D 700 for Type 13.

### PROPERTIES

| | |
|---|---|
| **FABRICATION** | |
| Plasticity Grades Available | 6 9, 12, 15 |
| Bulk Factor (D 392) | 2.4 max. |
| Molding Shrinkage (D 955), inch/inch | 0.002-0.00 |
| **MECHANICAL** | |
| Izod Impact Strength (D 256), ft.lb./in. notch | 0.35, min. |
| Compressive Strength (D 695), psi. | 31,000, av |
| Tensile Strength (D 651), psi. | 7 000, av. |
| Flexural Strength (D 790), psi. | 9 000, av. |
| Modulus of Elasticity in Flexure | 11 × 10⁵ a |
| **ELECTRICAL** | |
| Dielectric Strength, Short Time (D 149), volts mil | 340, min. |
| Volume Resistivity (D 257), ohm-cm. | 30 × 10¹³ |
| Arc Resistance (D 495) seconds | 130 |

60Hz 1M

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMA-5138
Black-25
Heat Resistant

### DESCRIPTION

BMMA-5138 Black-25 is a two-step phenolic material with low specific gravity for a heat resistant material, designed for utensils and appliance parts where exposure to elevated temperatures is required. Additional head resistance data are available from a UNION CARBIDE Technical Representative. BMMA-5138 Black-25 is designed specifically for powder molding, but may also be preformed.

BMMA-5138 Black-25 meets the requirements of ASTM Specification D 700, Type 13.

NEW PRODUCT DATA

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMA-5353
Black-25 DC
Heat Resistant

### DESCRIPTION

BMMA-5353 Black-25 DC is a two-step mineral filled compound formulated for appliance and automotive parts requiring a hard smooth surface combined with excellent dimensional stability and heat resistance. Its fast cure and low mold shrinkage will minimize the need for shrink fixtures where warpage can be a problem.

### PROPERTIES

...

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMRS-2035
Black-25 DC
Heat Resistant

### DESCRIPTION

BMRS-2035 Black-25 DC is a one-step* mineral-filled phenolic material recommended for iron handles and other appliance parts requiring a combination of heat resistance and good wet 'dry performance.

BMRS-2035 Black-25 DC meets ASTM Specification D 700, Type 13.

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMRS-5303
Black-25 DC
Heat Resistant

### DESCRIPTION

BMRS-5303 Black-25 DC is a completely reformulated injection molding grade of the two-step heat resistant type. Has excellent heat resistance coupled with superior dimensional stability at a medium molded density. Also has good barrel life and fast cures. Particularly recommended for under-the-hood automotive parts and appliance parts requiring good steam crack resistance.

BMRS-5303 Black-25 DC has been granted UL "Yellow Card" component recognition for use at temperatures not exceeding 150°C. in thicknesses no less than 1/16-inch. It also has an SE-0 flammability rating and an arc resistance rating of 180 seconds.

BMRS-5303 Black-25 DC will meet the requirements of ASTM Specification D 700 for Type 13.

### PROPERTIES

...

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMC-2035
Black-25
Heat Resistant

### DESCRIPTION

BMMC-2035 Black-25 is a one-step* mineral-filled phenolic material recommended for iron handles and other appliance parts requiring a combination of heat resistance and good wet 'dry performance.

BMMC-2035 Black-25 meets ASTM Specification D 700, Type 13.

### PROPERTIES

| | |
|---|---|
| **FABRICATION** | |
| Plasticity Grades Available | 15 |
| Bulk Factor (D 392) | 2.4, max. |
| Molding Shrinkage (D 955), inch/inch | 0.0045 |
| **MECHANICAL** | |
| Izod Impact Strength (D 256), ft.-lb./in. notch | 0.36 |
| Compressive Strength (D 695), psi. | 28,000 |
| Tensile Strength (D 651), psi. | 6,000 |
| Flexural Strength (D 790), psi. | 7,500 |
| Modulus of Elasticity in Flexure | $10 \times 10^5$ |
| **ELECTRICAL** | |
| Dielectric Strength, Short Time (D 149), volts/mil | 340 |
| Volume Resistivity (D 257), ohm-cm. | $5 \times 10^{13}$ |

| | 60Hz | 1MHz |
|---|---|---|
| Dielectric Constant (D 150) | 10 | 6 |
| Dissipation Factor (D 150) | 0.15 | 0.06 |

| | |
|---|---|
| **MISCELLANEOUS** | |
| Molded Specific Gravity (D 792) | 1.48–1.52 |
| Deflection Temp. at 264 psi, (D 648), °F. | 340 |
| Water Absorption, gain in weight (D 570), per cent | 0.40 |

* *To maintain rated plasticity at time of manufacture one-step phenolic materials should not be stored longer than three months, unless under refrigeration.*

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMD-5303
Black-25 DC
Heat Resistant

### DESCRIPTION

BMMD-5303 Black-25 DC is a low-dust two-step material formulated for appliance and electrical insulation parts requiring heat resistance and good dimensional stability. It is especially recommended for mechanical automotive applications.

BMMD-5303 Black-25 DC has been granted UL "Yellow Card" component recognition for use at temperatures not exceeding 150°C. in thicknesses no less than 1/16-inch. It also has an SE-0 flammability rating and an arc resistance rating of 180 seconds.

BMMD-5303 Black-25 DC will meet the requirements of ASTM Specification D 700 for Type 13.

### PROPERTIES

| | |
|---|---|
| **FABRICATION** | |
| Plasticity Grades Available | 6, 9, 12, 15 |
| Bulk Factor (D 392) | 2.4, max. |
| Molding Shrinkage (D 955), inch/inch | 0.002-0.003 |
| **MECHANICAL** | |
| Izod Impact Strength (D 256), ft.lb./in. notch | 0.35, min. |
| Compressive Strength (D 695), psi. | 31,000, av |
| Tensile Strength (D 651), psi. | 7 000, av. |
| Flexural Strength (D 790), psi. | 9.000, av. |
| Modulus of Elasticity in Flexure | $14 \times 10^5$, a |
| **ELECTRICAL** | |
| Dielectric Strength, Short Time (D 149), volts/mil | 340, min. |
| Volume Resistivity (D 257), ohm-cm. | $30 \times 10^{11}$ |
| Arc Resistance (D 495), seconds | 180 |

60Hz 1M

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMA-5138
Black-25
Heat Resistant

### DESCRIPTION

BMMA-5138 Black-25 is a two-step phenolic material with low specific gravity for a heat resistant material, designed for utensils and appliance parts where exposure to elevated temperatures is required. Additional heat resistance data are available from a UNION CARBIDE Technical Representative. BMMA-5138 Black-25 is designed specifically for powder molding, but may also be preformed.

BMMA-5138 Black-25 meets the requirements of ASTM Specification D 700, Type 13.



# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMA-5353
Black-25 DC
Heat Resistant

### DESCRIPTION

BMMA-5353 Black-25 DC is a two-step mineral filled compound formulated for appliance and automotive parts requiring a hard smooth surface combined with excellent dimensional stability and heat resistance. Its fast cure and low mold shrinkage will minimize the need for shrink fixtures where warpage can be a problem.

### PROPERTIES ...

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMRS-2035
Black-25 DC
Heat Resistant

### DESCRIPTION

BMRS-2035 Black-25 DC is a one-step* mineral-filled phenolic material recommended for iron handles and other appliance parts requiring a combination of heat resistance and good wet/dry performance.

BMRS-2035 Black-25 DC meets ASTM Specification D 700, Type 13.

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMRS-5303
Black-25 DC
Heat Resistant

### DESCRIPTION

BMRS-5303 Black-25 DC is a completely reformulated injection molding grade of the two-step heat resistant type. Has excellent heat resistance coupled with superior dimensional stability at a medium molded density. Also has good barrel life and fast cures. Particularly recommended for under-the-hood automotive parts and appliance parts requiring good steam crack resistance.

BMRS-5303 Black-25 DC has been granted UL "Yellow Card" component recognition for use at temperatures not exceeding 150°C. in thicknesses no less than 1/16-inch. It also has an SE-0 flammability rating and an arc resistance rating of 180 seconds.

BMRS-5303 Black-25 DC will meet the requirements of ASTM Specification D 700 for Type 13.

### PROPERTIES ...

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMC-2035
Black-25
Heat Resistant

### DESCRIPTION

BMMC-2035 Black-25 is a one-step* mineral-filled phenolic material recommended for iron handles and other appliance parts requiring a combination of heat resistance and good wet/dry performance.

BMMC-2035 Black-25 meets ASTM Specification D 700, Type 13.

### PROPERTIES

| | |
|---|---|
| **FABRICATION** | |
| Plasticity Grades Available | 15 |
| Bulk Factor (D 392) | 2.4, max. |
| Molding Shrinkage (D 955), inch/inch | 0.0045 |
| **MECHANICAL** | |
| Izod Impact Strength (D 256), ft.-lb. in. notch | 0.36 |
| Compressive Strength (D 695), psi. | 28,000 |
| Tensile Strength (D 651), psi. | 6,000 |
| Flexural Strength (D 790), psi. | 7,500 |
| Modulus of Elasticity in Flexure | $10 \times 10^5$ |
| **ELECTRICAL** | |
| Dielectric Strength, Short Time (D 149), volts/mil | 340 |
| Volume Resistivity (D 257), ohm-cm. | $5 \times 10^{13}$ |

| | 60Hz | 1MHz |
|---|---|---|
| Dielectric Constant (D 150) | 10 | 6 |
| Dissipation Factor (D 150) | 0.15 | 0.06 |

| | |
|---|---|
| **MISCELLANEOUS** | |
| Molded Specific Gravity (D 792) | 1.48–1.52 |
| Deflection Temp. at 264 psi, (D 648), °F. | 340 |
| Water Absorption, gain in weight (D 570), per cent | 0.40 |

* To maintain rated plasticity at time of manufacture one-step phenolic materials should not be stored longer than three months, unless under refrigeration.

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMD-5303
Black-25 DC
Heat Resistant

### DESCRIPTION

BMMD-5303 Black-25 DC is a low-dust two-step material formulated for appliance and electrical insulation parts requiring heat resistance and good dimensional stability. It is especially recommended for mechanical automotive applications.

BMMD-5303 Black-25 DC has been granted UL "Yellow Card" component recognition for use at temperatures not exceeding 150°C. in thicknesses no less than 1/16-inch. It also has an SE-0 flammability rating and an arc resistance rating of 180 seconds.

BMMD-5303 Black-25 DC will meet the requirements of ASTM Specification D 700 for Type 13.

### PROPERTIES

| | |
|---|---|
| **FABRICATION** | |
| Plasticity Grades Available | 6, 9, 12, 15 |
| Bulk Factor (D 392) | 2.4, max. |
| Molding Shrinkage (D 955), inch/inch | 0.002-0.006 |
| **MECHANICAL** | |
| Izod Impact Strength (D 256), ft.lb./in. notch | 0.35, min |
| Compressive Strength (D 695), psi. | 31 000, a |
| Tensile Strength (D 651), psi. | 7 000, av |
| Flexural Strength (D 790), psi. | 9 000, av |
| Modulus of Elasticity in Flexure | $14 \times 10^5$ |
| **ELECTRICAL** | |
| Dielectric Strength, Short Time (D 149), volts/mil | 340, min |
| Volume Resistivity (D 257), ohm-cm. | $30 \times 10^{13}$ |
| Arc Resistance (D 495), seconds | 130 |

60Hz


Published by AsbestosClaims.Law
asbestosclaims.law/library/19768/3

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMA-5138
Black-25
Heat Resistant

### DESCRIPTION

BMMA-5138 Black-25 is a two-step phenolic material with low specific gravity for a heat resistant material, designed for utensils and appliance parts where exposure to elevated temperatures is required. Additional heat resistance data are available from a UNION CARBIDE Technical Representative. BMMA-5138 Black-25 is designed specifically for powder molding, but may also be preformed.

BMMA-5138 Black-25 meets the requirements of ASTM Specification D 700, Type 13.

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMRS-2035
Black-25 DC
Heat Resistant

### DESCRIPTION

BMRS-2035 Black-25 DC is a one-step* mineral-filled phenolic material recommended for iron handles and other appliance parts requiring a combination of heat resistance and good wet/dry performance.

BMRS-2035 Black-25 DC meets ASTM Specification D 700, Type 13.

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMC-2035
Black-25
Heat Resistant

### DESCRIPTION

BMMC-2035 Black-25 is a one-step* mineral-filled phenolic material recommended for iron handles and other appliance parts requiring a combination of heat resistance and good wet/dry performance.

BMMC-2035 Black-25 meets ASTM Specification D 700, Type 13.

### PROPERTIES

| | |
|---|---|
| **FABRICATION** | |
| Plasticity Grades Available | 15 |
| Bulk Factor (D 392) | 2.4, max. |
| Molding Shrinkage (D 955), inch/inch | 0.0045 |
| **MECHANICAL** | |
| Izod Impact Strength (D 256), ft.-lb. in. notch | 0.36 |
| Compressive Strength (D 695), psi. | 28,000 |
| Tensile Strength (D 651), psi. | 6,000 |
| Flexural Strength (D 790), psi. | 7,500 |
| Modulus of Elasticity in Flexure | $10 \times 10^5$ |
| **ELECTRICAL** | |
| Dielectric Strength, Short Time (D 149), volts/mil | 340 |
| Volume Resistivity (D 257), ohm-cm. | $5 \times 10^{13}$ |

| | 60Hz | 1MHz |
|---|---|---|
| Dielectric Constant (D 150) | 10 | 6 |
| Dissipation Factor (D 150) | 0.15 | 0.06 |

| | |
|---|---|
| **MISCELLANEOUS** | |
| Molded Specific Gravity (D 792) | 1.48–1.52 |
| Deflection Temp. at 264 psi, (D 648), °F. | 340 |
| Water Absorption, gain in weight (D 570), per cent | 0.40 |

* *To maintain rated plasticity at time of manufacture one-step phenolic materials should not be stored longer than three months, unless under refrigeration.*

NEW PRODUCT DATA

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMA-5353
Black-25 DC
Heat Resistant

### DESCRIPTION

BMMA-5353 Black-25 DC is a two-step mineral filled compound formulated for appliance and automotive parts requiring a hard smooth surface combined with excellent dimensional stability and heat resistance. Its fast cure and low mold shrinkage will minimize the need for shrink fixtures where warpage can be a problem.

PROPERTIES ...

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMRS-5303
Black-25 DC
Heat Resistant

### DESCRIPTION

BMRS-5303 Black-25 DC is a completely reformulated injection molding grade of the two-step heat resistant type. Has excellent heat resistance coupled with superior dimensional stability at a medium molded density. Also has good barrel life and fast cures. Particularly recommended for under-the-hood automotive parts and appliance parts requiring good steam crack resistance.

BMRS-5303 Black-25 DC has been granted UL "Yellow Card" component recognition for use at temperatures not exceeding 150°C. in thicknesses no less than 1/16-inch. It also has an SE-0 flammability rating and an arc resistance rating of 180 seconds.

BMRS-5303 Black-25 DC will meet the requirements of ASTM Specification D 700 for Type 13.

PROPERTIES ...

# BAKELITE®

## PHENOLIC MOLDING MATERIALS

UNION CARBIDE

BMMD-5303
Black-25 DC
Heat Resistant

### DESCRIPTION

BMMD-5303 Black-25 DC is a low-dust two-step material formulate for appliance and electrical insulation parts requiring heat resistanc and good dimensional stability. It is especially recommended for m chanical automotive applications.

BMMD-5303 Black-25 DC has been granted UL "Yellow Card" cor ponent recognition for use at temperatures not exceeding 150°C. thicknesses no less than 1/16-inch. It also has an SE-0 flammabili rating and an arc resistance rating of 180 seconds.

BMMD-5303 Black-25 DC will meet the requirements of ASTM Spec fication D 700 for Type 13.

### PROPERTIES

| | |
|---|---|
| **FABRICATION** | |
| Plasticity Grades Available | 6, 9 12. |
| Bulk Factor (D 392) | 2.4, max. |
| Molding Shrinkage (D 955), inch/inch | 0.002-0.0 |
| **MECHANICAL** | |
| Izod Impact Strength (D 256), ft.lb./in. notch | 0.35, mir |
| Compressive Strength (D 695), psi. | 31,000, a |
| Tensile Strength (D 651), psi. | 7,000, a |
| Flexural Strength (D 790), psi. | 9 000, a |
| Modulus of Elasticity in Flexure | $14 \times 10^5$ |
| **ELECTRICAL** | |
| Dielectric Strength, Short Time (D 149), volts mil | 340, mir |
| Volume Resistivity (D 257), ohm-cm. | $30 \times 10^{1}$ |
| Arc Resistance (D 495) seconds | 180 |

60Hz