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B10S Product Data Sheet

B10S Fine Weave Cotton Phenolic Laminate

Material Details

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|------------------------|--|
| Grade: | B10S |
| Description: | Phenolic Cotton. B10, phenolic cotton for higher temp & electrical applications |
| Comments: | Very fine weave cotton phenolic laminate with high electrical strength and low water absorption. Can be machined to a very fine finish for precision components. |
| Specifications: | BSEN 60893 - PFCC204The closest NEMA equivalent to this specification is NEMA LE |
| Body Colour: | Sandy Brown |
| Cover Colour: | Sandy Brown |
| Finish: | Satin/Glossy |
| Size: | 1220 x 1220 Thickness Range: 0.8 - 150.0 |

Typical Applications

- Motor Brushes

General Properties

| Property | Unit of measure | Typical Value |
|------------------|-------------------|---------------|
| Density | g/cm ³ | 1.35 |
| Water Absorption | mg | 80 mg |

¥ Where relevant, the flammability test method is used solely to control and monitor consistency of production. Under no conditions should the results be considered in relation to fire hazards under actual conditions of use.

Electrical Properties

| Property | Unit of measure | Typical Value |
|---------------------------------------|-----------------|---------------|
| IR (24hrs Water Immersed) | G Ω | 16 |
| IR (Dry) | G Ω | 16 |
| Electric Strength (Flat Rapid) | MV/m | 7 |
| Breakdown Voltage (Edge Step by Step) | kV | 32 |
| Tracking Index | V | 110 |

Mechanical Properties

| Property | Unit of measure | Typical Value |
|-------------------------|-------------------|---------------|
| Flexural Strength | MPa | 145 |
| Tensile Strength | MPa | 80 |
| Impact (Notched CHARPY) | kJ/m ² | 8.5 |

Thermal Properties

| Property | Unit of measure | Typical Value |
|-----------------------------|-----------------|---------------|
| Thermal Rating Continuous | °C | 115 |
| Thermal Rating Intermittent | °C | 125 |

Disclaimer: The above values are based upon routine test data and do not form the basis of a supply contract. These products may be used in a diverse range of applications and whilst every effort is made to ensure the information in this data sheet is accurate, it must be stressed that it is the user's responsibility to ensure suitability for the intended end use.

Source: <https://www.attwater.com/products/b10s/>