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G10 QDX Product Data Sheet

Material Details

| Grade: | G10 QDX. (Type: Glass Based Laminates - SRBG) |
|------------------|---|
| Description: | Epoxy Glass. Epoxy glass laminate with multi-axis fibre reinforcement |
| Comments: | Specialist grade epoxy glass laminate. Temperature class H (180 C) epoxy resin, with a quadriaxial reinforcement which gives better performance where the orientation of mechanical loads varies significantly. |
| Body Colour: | Pale Green |
| Cover Colour: | Pale Green |
| Standard Finish: | Satin/Glossy |
| Size: | Enquire Thickness Range: Enquire † |

Typical Applications

- Mechanical ApplicationsHigh Voltage Insulation
- High Temperature Components
- Cryogenic Resistance Components

General Properties

| Property | Unit of measure | Typical Value |
|-----------------------------------|-----------------|---------------|
| Density | g/cm3 | 2.0 |
| Water Absorption (thickness 10mm) | mg | 30 |

¥ 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 |
|-------------------|-----------------|---------------|
| Electric Strength | kV/mm | 13 |
| Breakdown Voltage | kV | 45 |

| Property | Unit of measure | Typical Value |
|----------------|-----------------|---------------|
| Tracking Index | V | 180 |

Mechanical Properties

| Property | Unit of measure | Typical Value |
|---|-----------------|---------------|
| Flexural Strength | МРа | 340 min |
| Flexural Strength at 150°C | МРа | 170 min |
| Flexural Modulus (approx.) | GPa | 17 |
| Compressive Strength - perpendicular to laminations | МРа | 550 |
| Compressive Strength - parallel to laminations | MPa | 250 |
| Tensile Strength | MPa | 202 |
| Impact Strength (notched Charpy) | kJ/m2 | 50 |

Thermal Properties

| Property | Unit of measure | Typical Value |
|---------------------------|-----------------|---------------|
| Thermal Rating Continuous | °C | 180 |

Notes

• Datasheet Issue No. 1

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/qdx/