TFUER
MATERIALS & SOLUTIONS

TFUER-T311

Epoxy Glassfiber Laminates

DESCRIPTION

Tfuer-T311(G10) is a grade of fiberglass laminate that is reinforced with epoxy resin. It is known for its strength, durability, and excellent electrical insulating properties. It is typically used in applications where mechanical strength, high insulation resistance, and low moisture absorption are crucial.

Thickness: 0.2 mm ~ 50 mm.
Dimension: 1020 x 1220 mm, 1220 x 2440 mm.

KEY FEATURES

1. High Strength
2. Electrical Insulation
3. Heat Resistance
4. Moisture Resistance
5. Mechanical Strength

APPLICATION

1. **PCBs:** T311 is commonly used in printed circuit boards (PCBs), particularly in high-frequency or high-power electronics where electrical insulation and mechanical stability are required.
2. **Electrical Insulation:** T311 is widely used in electrical insulation sheets and components like connectors, switchboards, and motor parts.
3. **Structural Components:** It's used in aerospace, automotive, and industrial equipment for applications that require both strength and electrical insulation.

BENEFITS

1. **Durability:** T311 is highly durable and resistant to impact, making it ideal for long-term use in challenging environments.
2. **Customizability:** It can be cut and machined into various shapes and sizes, making it adaptable for specific applications.

Specification Data Sheet	Method	Unit	T311
Density	ISO 1183 / A	g/cm^3	2.0
Flexural strength	ISO 178	MPA	350 min.
Flexural modulus of elasticity	ISO 178	MPA	24000 min.
Tensile strength	ISO 527	MPA	300 min.
Compressive strength perpendicular	ISO 604	MPA	350 min.
Impact strength (Charpy) parallel	ISO 179/3C	kJ/m^2	45 min.
Electric strength perpendicular	IEC 60243-1 (90°C in oil)	KV/mm	10.6 min.
Breakdown voltage parallel	IEC 60243-1 (90°C in oil)	KV	45 min.
Insulation resistance after immersion	IEC 60167 (in water)	MOhm	$5x10^5$ min
Comparative tracking index CTI	IEC 60112	CTI	200 min
Thermal endurance	IEC 60216	°C	110
Water Absorption	ISO 62	%	0.2 max
Flame Retardant	UL 94		HB
Color			Green,Natural,Yellow,Black

All information provided is based on the results of experiments conducted with the utmost care in our laboratories. However, it remains the user's responsibility to conduct additional tests to confirm the material's suitability for specific applications and ensure successful processing and usage.

RoHS Declaration: This material complies with the requirements of the EU Directive 2011/65/EU (RoHS). It does not contain any substances of very high concern (SVHC) as specified in Article 4, Paragraph 1 of the directive.