

Epoxy Glass G 10.

General information

Manufactured from woven glass cloth and impregnated with epoxy resin it is laminated at elevated pressures and temperatures. It is commonly known as G 10.

The resultant product displays excellent electrical and mechanical properties from cryogenic(-50 $^{\circ}$ C) to elevated temperatures (155 $^{\circ}$ C).Coupled with this is its excellent machinability, flame resistance, moisture and chemical resistant properties.

Applications

Motor/generator slot wedges and packers, fabricated components in electrical switchgear, high frequency applications and in corrosive atmospheres.

Properties:

Electrical& Mechanical		Values
Impact Strength parallel to laminations(charpy)	Normal Conditions	33MPa
Flexural Strength	Normal Conditions	340MPa
Insulation resistance after immersion in water	D-24/23	\geq 5.0×10 ⁸ Ω
Dielectric strength perpendicular to laminations.		14.2MV/m
(In transformer oil @90±2°C,1mm thick)		
Breakdown voltage parallel to laminations.		40KV
(In transformer oil @90 \pm 2°C)		
Permittivity(48-62Hz)		≤5.5
Permittivity(1MHz)		≤5.5
Dissipation factor(48-62Hz)		≤0.40
Dissipation factor(1MHz)		≤0.40
Water Absorption	D-24/23	19mg
	1.6mm thick	
Density		1.70-1.90mg
Flammability	Class	—
Physical		
Colour		Green
Standard Thickness		0.2mm-150mm
Sheet Size		1220×1020mm