## micam

EPOXY GLASSFIBRE LAMINATE

EFR4

MICAM's EFR4 is an epoxy-woven glassfibre laminate, with excellent electrical, mechanical and flame resistant properties.

Characteristics	Excellent electrical and mechanical properties, flame retardant	
Colours	Translucent green, black and other colours available on request	
Thickness	0.1 mm to 100 mm available on request	
Sheet Size 1220mm x 920mm, 1220mm x 1060mm (panel sizes cut on request)		

		units	test method
GENERAL PROPERTIES			
Relative Density	1.95	-	IEC 1183-A
Temperature rating	130	°C	IEC 216
Water Absorption	10	mg/50x50x3mm	IEC 62-1
Flammability	flame retardant	-	-
MECHANICAL PROPERTIES			
Flexural Strength	470	MPa	ISO 178
Flexural Modulus	20,000	MPa	ISO 178
ELECTRICAL PROPERTIES			
Insulation Resistance	105	MΩ	IEC 167
Dielectric Strength Flatwise (in oil at 90°C)	14	MV/m (1.6 mm)	IEC 243-1
Dielectric Strength Edgewise (in oil at 90°C)	60	kV (3mm)	IEC 243-1
Dissipation Factor at 50 Hz	0.006	-	IEC 250
Dissipation Factor at 1MHz	0.008	-	IEC 250
Permittivity at 50 Hz	4.5	-	IEC 250
Permittivity at 1 MHz	4.5	-	IEC 250

## SPECIFICATION COMPLIANCE

EN 60893-3-2/EPGC202; NEMA LI-1 FR4

## ENVIRONMENTAL COMPLIANCE

RoHS compliant; REACH compliant

## QUALITY SYSTEM APPROVAL

Certified by NSAI to I.S. EN ISO 9001:2015 Reg. No. IE-19.0675.



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