



## American Epoxy Epoxyglas G10, FR4 Product Data Sheet

### Product Description

American Epoxy G10/FR4, is a laminate sheet comprised of a flame-retardant epoxy resin and a woven fiberglass substrate. This grade qualifies to NEMA FR4 and MIL-I-24768/27

### Typical Applications

This material has high mechanical strength and excellent electrical insulating qualities in both dry and humid conditions. These attributes along with good fabricating characteristics allow this grade to be used in a wide variety of electrical and mechanical applications.

### Typical Properties

#### **Physical Data**

	<u>Typical Values</u>	<u>Units</u>
Specific Gravity	1.85	
Water Absorption-.125"	< 0.1	%
Temperature Index	140 \ 284	°C \ °F
Rockwell Hardness	110	M scale
Bond Strength	> 2,200 \ 1,000	LBS \ kgs
Flexural Strength-LW-A-.125"	> 90,000 \ <b>621</b>	PSI \ MPa
Flexural Strength-LW-E 1/150	> 65,000 \ <b>448</b>	PSI \ MPa
Izod Impact Strength-LW	> 12	ft-lbs/in
Izod Impact Strength-CW	> 9	ft-lbs/in
Compressive Strength-Flatwise	> 75,000 \ <b>518</b>	PSI \ MPa
Flame Resistance	94 VO	

#### **Electrical Data**

Dielectric Breakdown-A	> 60	kV
Dielectric Breakdown-D48/50	> 55	kV
Permittivity-A	4.8	
Permativity-D24/23	4.8	
Dissipation Factor-A	0.017	
Dissipation Factor-D24/23	0.018	

American Epoxy provides this data as information only and does not imply any warranty for its use or application.

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