



Acculam[®] Epoxyglas G10, FR4 Product Data Sheet

Product Description

Acculam[®] Epoxyglas 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 Value</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" | > 65,000 \ 448 | PSI \ MPa |
| Flexural Strength-CW-A-.125" | > 50,000 \ 345 | PSI \ MPa |
| Izod Impact Strength-LW | > 10 | ft-lbs/in |
| Izod Impact Strength-CW | > 8 | ft-lbs/in |
| Compressive Strength-Flatwise | > 60,000 \ 415 | PSI \ MPa |

Electrical Data

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

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