

ISO 9001: 2015 - QUALITY ASSURANCE Distributor & Fabricator of Engineered Plastics & Electrical Insulation Products

NEMA GRADE G11

Property Profile NEMA GRAD	E	Dimension	G11
Military Specifications			P-18177
Military Type			GEB
Base Material Glass Cloth			
Colour Green			
Resin			Ероху
Physical Properties			
Density		#/cu.in.	.070
Water Absorption (1/8"thk)		%	
Hardness		R"M"	115
Tensile Strength – with grain		PSI	45,000
Compressive Strength - Flatwise		PSI	80,500
Flexural – Flatwise with grain		PSI	75,000 plus
Bonding Strength (1/2" thick)		#	2,000
Electrical Properties			
Impact – IZOD edgewise with gra	'n	Ft.lb./in.	10
Shear – Flatwise (1/8" thick)		PSI	25,000
Dielectric Strength – perpendicula (Tested in transformer oil, 23° C)	ar	VPM Short time	-
Dissipation Factor		10 ⁶ cycles/sec	.017
Dielectric Constant		10 ⁶ cycles/sec	5.2
Volume Resistivity		Megaohms-cm	5x10 ⁶
Surface Resistivity		Megaohms	1x10 ⁷
Arc Resistance		Seconds	-
Operating Temperature		Degrees C.	180
Operating Temperature		Degrees F.	356
: Test Samples 1/8" thick laminate			
: Test Methods	Impact Strength	D732 – condition E – 48/50	
	Arc Resistance	D495 – condition A	
	All others I	D229	

These are average properties with periodic monitoring by NEMA. However, the final determination as to the suitability of this product for any use contemplated is the sole responsibility of the user. There is no warranty, expressed or implied, including without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall GRT Genesis be liable for incidental or consequential damage.

Values are based on typical Test Methods and Conditions and published for Reference purposes only