



# Aurora Technologies

## Material Data Sheet

### **NEMA Grade XX**

#### **Description:**

Paper based Phenolic provides low cost electrical and mechanical properties. They are widely used for switchboards, panel boards, insulating washers and intricate punched parts.

#### **Typical Properties:**

	<u>Units</u>	<u>Grade XX</u>
<b>Physical</b>		
Color	-	Natural/Black
Density	lb/in <sup>3</sup>	.048
Water Absorption	%	0.5
Hardness	Rockwell M	100
Tensile	PSI	13,500
Compressive	PSI	30,000
Flexural	PSI	17,000
Max. Operating Temp.		
Electrical	C	140
Mechanical	C	140
Impact Strength	ft-lb/in	0.55
Shear	PSI	10,000
<b>Electrical</b>		
Dielectric Strength	vpm, short time	500
Dissipation Factor	@10 <sup>6</sup> cycles/sec	0.040
Dielectric Constant	@10 <sup>6</sup> cycles/sec	4.6
Volume Resistivity	megohm-cm	4x10 <sup>5</sup>
Surface Resistivity	megohm	4x10 <sup>4</sup>
Arc Resistance	seconds	n/a
Parallel Dielectric	kv	60

\*\*All of the properties listed above are typical values. These properties may vary based upon the manufacturer and environmental conditions. If specific criterion is to be met, then please contact one of our sales representatives for further evaluation.