

## 21-97 Epoxy Segment Plate

### Composition

21-97 is an Epoxy resin bonded mica paper plate milled to NEMA grade 3 P thickness tolerance. The epoxy resin in 21-97 is fully cured to "C" stage giving the material maximum resistance to flow under thermal and compressive stresses. There are several grades available depending on the type of mica paper, binder content, application & surface characteristics.

### Application

21-97 plate is used extensively for segment insulation in all types of commutators of small, medium and large motors including traction motors. 21-97 plate has good machining characteristics and may be sawed or punched to make segments, washers or discs and other flat parts.

### Product Data

Property	Unit	Value
Thermal Classification	°C	155
Thickness range	mm	0.40 - 1.6
Thickness Tolerance	mm	Avg. $\pm 0.025$ Individual $\pm 0.050$
Binder Content	%	$8 \pm 3$
Dielectric Strength	kV/mm	> 20
Heat stability as per IEC 371-2-11; 220°C / 600 kg/cm <sup>2</sup> / 30 minutes.		No exudation of binder & no mica displacement
Compressibility as per IEC 371-2-12; at 600 kg /cm <sup>2</sup> pr	%	At R.T. - 3 max. At 200°C - 2 max.
Flexural strength	N/cm <sup>2</sup>	> 220 for Phlogopyte based > 300 for Muscovite based

### Available size of sheets

1000 mm X 780 mm  $\pm 10$  mm  
780 mm X 500 mm  $\pm 10$  mm

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