

01-97 EPOXY MOULD PLATE

Composition

01-97 mica moulding plate is a hot forming plate conforming to NEMA grade 2. Epoxy resin binder in 01-97 is partially cured, so that it will soften under heat and facilitate good moulding.

Application

For hot moulding of intricate parts, such as mica commutator cones, end bell insulation, slot cells, coil forms, tubes etc.

Processing

The layout comprising of the required number of layers of thin mica moulding plates (cut to definite shape), is set in a pre determined pattern. It is then heated uniformly to a temperature of 403 K –423 K, till it becomes soft. It takes the required form when moulded under pressure. It retains its form when cooled under pressure. The duration, temperature and pressure will have to be determined by application. These moulded parts, if required, can be fully cured under heat and pressure for several more hours to develop their full properties.

Typical curing schedule for hot moulded parts.

Temperature: 453 K – 493 K

Pressure: 14 - 35 kg/cm²

Duration: 2 to 4 hrs.

Exact curing schedules are to be arrived at by the users, depending on the desired final properties of the moulded parts.

Product Data

Properties	Unit	Value
Thermal Classification	K	428
Thickness	mm	0.25 - 1.5
Thickness Tolerance	mm	Avg. - Upto 24 mil (0.6 mm) ± 0.025, over 24 mil ± 0.050 min. ± 0.075
Binder Content	%	12 - 15
Mouldability		When 2 inch wide strip is heated (408 K - 423 K) & moulded over a mandrel of specified dia., no deflaking to be observed.
Dielectric Strength	kV/mm	> 20

Shelf Life

Six months at 20 °C from the date of manufacturing.

Different Grades

Code No.	Mica Type	Binder content, %	Milled/Unmilled
01 - 97 - 06	6 1 st Ruby	14 - 20	Unmilled

Available Size of sheets

1050 mm X 780 mm and 900 mm X 900 mm ± 10 mm
 780 mm X 525 mm and 900 mm X 450 mm ± 10 mm
 980 mm X 780 mm ± 10 mm