

## MICA GLASS TAPE ( Resin rich ) Type : CM 26 G RR

### CLASS - F

**General description :** This tape is thermosetting insulating material flexible at room temperature, Plastic and sticky at elevated temperature. It is made of uncalcined muscovite mica paper and glass cloth, bonded together with suitable epoxy-novolac resin.

**Application :** Is mainly used in resin rich insulating systems as main insulation for bars and coils of motors, hydro and turbo generators up to highest voltage levels working under the condition of thermal insulation class F (155 °C)

- Insulation of traction motor armature coils.
- Insulation of the pole and Interpol coils of D.C. Motors.
- Conductor and main wall insulation for hot pressed diamond and concentric coils for medium and high voltage motors.
- Conductor and main wall insulation of medium, high and ultra high voltage generators.
- Manufacture of simple and complex formed insulation parts where a rigid final product is required (example : V-rings, tubes, V-channels)
- Insulation of special items where extreme high voltage is present and excellent resistance to corona is required.

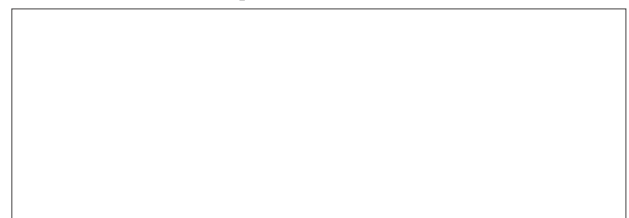
**Processing :** this tapes is supplied in "B" stage condition and require pressing and curing before optimum electrical properties are achieved.

#### Technical data as supplied :

Type : CM 26 G RR

<b>Nominal thickness</b>	<b>mm</b>	<b>0.12</b>	<b>0.16</b>	<b>0.20</b>
<b>Tolerance</b>	<b>mm</b>	<b>+0.02</b>	<b>+0.03</b>	<b>+0.03</b>
<b>Width</b>	<b>mm</b>	<b>10, 15, 20, 25, 30 ± 1 mm</b>		
<b>Length</b>	<b>m/roll</b>	<b>50</b>		
<b>Weight of Tape</b>	<b>g/m<sup>2</sup></b>	<b>160 ± 20</b>	<b>240 ± 20</b>	<b>280 ± 20</b>
<b>Weight of mica Paper</b>	<b>g/m<sup>2</sup></b>	<b>75 ± 5</b>	<b>120 ± 10</b>	<b>150 ± 10</b>
<b>Weight of Glass Cloth</b>	<b>g/m<sup>2</sup></b>	<b>30 ± 2</b>		
<b>Binder Content</b>	<b>g/m<sup>2</sup></b>	<b>60 ± 20</b>	<b>90 ± 20</b>	<b>100 ± 20</b>
<b>Tensile Strength</b>	<b>N/cm</b>	<b>≥ 150</b>		
<b>Volatile content</b>	<b>%</b>	<b>0.4 ~ 0.8</b>		
<b>Stiffness</b>	<b>N/m</b>	<b>≤ 55</b>		
<b>Thermal Class</b>		<b>F</b>		
<b>Shelf life at 20 deg C</b>	<b>month</b>	<b>06</b>		
<b>Shelf life at 5 deg C</b>	<b>month</b>	<b>12</b>		

Contd ... Pg. 2.



Properties after pressing 4 hours at 160°C & 1N/mm <sup>2</sup>	Test Method	Unit	Value		
Nominal thickness		mm	0.12	0.16	0.20
Thickness after pressing			0.09	0.135	0.16
Thermal conductivity	DIN 52612	Kcal/m/n/°C	0.25 - 0.30		
Linear thermal co-efficient of expansion	IEC 112	1/°K	Approx 10 x 10 <sup>-6</sup>		
Flexural strength at 23°C & 150°C	ISO 178	N/mm <sup>2</sup>	≥ 200 / ≥ 150		
Dielectric strength 23°C & 150°C	IEC 243	Kv/mm	≥ 50 / ≥ 40		
Dielectric constant 23°C - 150°C	IEC 250		4.5 - 5.0		
Tracking resistance	IEC 112		CT1 350		
Dielectric loss factor at 23°C 130°C 155°C	IEC 250		≤ 0.01 ≤ 0.05 ≤ 0.10		

**Recommended curing condition :** 1 hours at 160 deg C under pressure 1~2 N/mm<sup>2</sup>

**Post curing :** 4 hours at 160 deg C

**Delivery :** usually delivered with or without interleaving of polyethene film which must be removed before using and tapes is delivered on standard core of ID 55mm

**Health & safety :** While processing this tape we recommend to follow all hygiene and safety standards.