

# mica tapes

## Mica Mat® 77986

- ▶ Low Binder Content
- ▶ Absorbs and retains VPI resins
- ▶ Excellent Flexibility
- ▶ Ease of application
- ▶ Excellent temperature stability

### General description

Mica Mat® 77986 is a 6.5 mil, 3-ply tape with glass cloth on one side and a PET mat on the other side of 3 mil calcined mica paper. It is designed for VPI impregnation and, when used with the proper resin, exhibits excellent electrical characteristics over a wide temperature range.

### Application

Mica Mat® 77986 tape is designed to be suggested for use as ground and turn insulation where a high degree of conformability is required. This tape is compatible with a number of commercially available solventless epoxy and polyester resins. It is designed for VPI impregnation and, when used with the proper resin, exhibits excellent electrical characteristics over a wide temperature range. It is an excellent choice for global impregnation of machine designs up to 15kV and thermal class 180.

### Processing

Mica Mat® 77986 tape may be applied by either hand or machine taping. Coils should be processed per the cure cycle suggested for the particular resin or varnish chosen for coil treatment.

### Order Data

Mica Mat® 77986 tape is available as slit tape or wrapper, 3/4 to 38 inches in width (1.9 to 91.44 cm).

### Shelf life

Mica Mat® 77986 tape should exhibit no shelf life limitations when stored for up to 1 year under normal room temperature conditions of 77°F (25°C).

### Availability

This product is available from Von Roll USA, Inc. or from authorized Von Roll distributors. For the name of your distributor or for more information on this product, contact our Customer Service department, (518) 344-7100.

### Specifications

The properties shown above are typical values only, and should not be used as a basis for preparing specifications. Contact our Customer Service department, (518) 344-7100 for assistance in preparation of specifications for your specific system application.

### Health and safety

Material Safety Data Sheets defining the known hazards and describing safety precautions appropriate for this product are available upon request from Von Roll USA, Inc., 200 Von Roll Drive, Schenectady, New York 12306 (518) 344-7100. Similar information sheets for solvents and other chemicals used with this product may be obtained from the appropriate supplier and used accordingly.

The product properties set forth in this data sheet are based on the results of testing of typical material produced by the affiliated companies of Von Roll Holding Ltd. (underneath referred as Von Roll). Some variation in product properties is typical. Comments or suggestions relating to any subject other than product properties are offered only to call the end-user's or other person's attention to considerations which may be relevant in the independent determination of the use and/or manner of use of product. Von Roll does not claim or warrant that the use of its product will have the results described in this data sheet or that the information provided is complete, accurate or useful. The user should test the product to determine its properties and its suitability for the intended use. Von Roll expressly disclaims any liability for any damage, harm, injury, cost or expense to any person resulting directly or indirectly from that person's reliance on any information contained in this data sheet. Nothing contained in this data sheet constitutes representation or warranty as to any matter whatsoever. Von Roll makes no warranties whatsoever in this data sheet, expressed or implied, including any implied warranty or fitness for a particular use or purpose. Von Roll shall in no event be liable for incidental, exemplary, punitive or consequential damages.

		Value	Test norm
<b>Weight</b>			
Total weight	lbs/syd (g/m <sup>2</sup> )	0.357 (193)	
<b>Dimensions</b>			
Mica Mat	mils (mm)	3.0 (0.076)	
Total thickness	mils (mm)	6.7 (0.170)	ASTM D-374C
Glass fabric	mils (mm)	2.0 (0.050)	
Polyester mat	mils (mm)	1.4 (0.035)	
<b>Weight</b>			
Resin content	%	8	
Mica Mat weight	lbs/syd (g/m <sup>2</sup> )	0.217 (118)	
Glass fabric weight	lbs/syd (g/m <sup>2</sup> )	0.050 (27)	
Polyester mat weight	lbs/syd (g/m <sup>2</sup> )	0.050 (27)	
Bonding agent		Epoxy	
Coverage	yd <sup>2</sup> /lb (m <sup>2</sup> /kg)	2.80 (0.0052)	
<b>Mechanical properties</b>			
Tensile strength	lb/in (N/cm), avg.	100 (175)	ASTM D-828
Elongation	%	<2	
Stiffness	mg	900	Gurley
<b>Electrical properties</b>			
Dielectric strength, Short Time	V/mil(kV/mm)	>500 (19.7)	ASTM D-149