

mica tapes

Mica Mat® 77944

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

General description

Mica Mat® 77944 tape is a 7.5 mil three-ply epoxy bonded mica paper tape designed for vacuum pressure impregnation processing. The 4 mil calcined mica paper has glass cloth on one side and a PET mat on the other. The PET mat improves handling characteristics and provides good resin flow during processing. The resin binder in this tape was selected to be compatible with a wide variety of solventless polyester and epoxy VPI resins. The use of polyester mat as a backer provides wetting action during VPI resin treatment for a strong layer-to-layer bond after subsequent resin cure. The woven glass reinforcement provides high tensile strength and optimum flexibility.

Application

Mica Mat® 77944 tape is suggested for use as ground insulation on AC stator windings to be VPI processed. Typical uses for this tape include motors for pulp and paper mills, hermetic motors and irrigation pump motors. MICA MAT® 77944 tape has also been successfully used to improve heat transfer of ground insulation on VPI processed DC motor field coils. The thermal, mechanical and electrical characteristics of the finished winding will be governed by the particular resin chosen for VPI processing.

Processing

Mica Mat® 77944 tape may be applied by either hand or machine taping with the glass cloth to the outside of the coil for maximum mechanical strength.

Order Data

MICA MAT® 77944 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® 77944 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.

Safety Precautions

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
Mechanical properties			
Tensile strength	lb/in (N/cm), avg.	70 (122.64)	ASTM D-828
Elongation	%	<2	
Stiffness	mg	1100	Gurley
Dimensions			
Mica Mat	mils (mm)	4.0 (.102)	
Weight			
Total weight	lbs/syd (g/m ²)	0.29 (155)	
Dimensions			
Total thickness	mils (mm)	7.5 (0.191)	
Glass fabric	mils (mm)	2.0 (0.051)	
Weight			
Bonding agent		Epoxy	
Resin content	%	19	
Coverage	yd ² /lb (m ² /kg)	2.13 (0.81)	
Electrical properties			
Dielectric strength, Short Time	V/mil(kV/mm)	>500 (19.7)	ASTM D-149