

winding and bracing

Poly Glas® 76831

- ▶ Designed to affordably and effectively replace insulated steel rings in motor and generator end turn supports
- ▶ Cures during pre-heat cycle
- ▶ Very strong and resilient support
- ▶ Simple to install
- ▶ Provides stronger, more rigid support than untreated ropes in VPI systems
- ▶ Dependable, proven performance

General description

Permafil® 76831 rope is designed to secure and support motor components and protect them from the destructive vibrations of mechanical and centripetal forces. The product is constructed of a tough glass yarn that is braided into the rope form and thoroughly impregnated with an uncured, fully catalyzed, thermosetting polyester resin, resulting in a pliable rope that cures to a steel-hard, rigid form. Permafil® rope is suggested as a replacement for both steel and laminated fiberglass surge rings, spacers on DC armatures, as a winding head support on random wound machines, and as a support system for the nose sections of AC form wound coils.

Application

Because Permafil® rope conforms well before cure and takes a firm set after cure, it can be used in many applications where additional straps or supporting braces would improve the apparatus. Possible uses for Permafil® rope are governed only by need and imagination.

Processing

Permafil® 76831 rope is tied or otherwise anchored to whatever it is desired to support or separate and then cured in place. Specific techniques will vary with the ingenuity of the user. Fully cured, Permafil® rope is compatible with most insulating materials.

Suggested cure cycles (at temperature) are:

- 4 hours @ 125°C
- or 2 hours @ 135°C

or 1 hour @ 150°C

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.

Storage Conditions

Permafil® 76831 has a shelf life of at least six months when stored at room temperature. Refrigeration extends shelf life considerably. Heat and direct sunlight should be avoided.

Order Data

Permafil® 76831 rope is available in diameters of 1/4, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, and 1" in standard lengths of 50 feet.

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.

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
Weight			
Resin content	%	26-32	
Bonding agent		Polyester	
Mechanical properties			
Tensile strength	PSI	1.2×10^5	ASTM D-828
Electrical properties			
Arc resistance	Seconds	120	ASTM D 495
Mechanical properties			
Compressive strength -	PSI	$\geq 7.0 \times 10^4$	
Flexural modulus	PSI	4.7×10^6	

