

## Technical Datasheet

# Coated Glass

**FUSA-FLEX® 76593**

- **Thermal class 155°C**
- **Excellent moisture and chemical resistance**
- **Low dielectric constant**
- **Quick, low temperature cure**

**Description**

FUSA-FLEX® 76593 is a B-staged epoxy-coated polyester-glass tape that fuses during cure to provide a tough moisture and chemical seal. Insulation for coils can be easily flexed for winding, even pounded and scuffed without breaking the seal. The epoxy resin in the tape flows with heat during the curing process, while the polyester warp threads shrink, pulling the tape down tightly. This ensures a leak-proof seal without the need for any external pressure. The simple processing of this material makes it adaptable to commonly used cure cycles.

**Application**

FUSA-FLEX® 76593 sealable armor tape may be applied over any cured mica ground insulation. As an example, for a sealed system on coils 600 volts or less, two layers of 3/4" FUSA-FLEX® 76593 half - lapped over the entire coil is recommended. It is normally applied by hand but may be applied with normal machine taping equipment if properly equipped. When taping the coil nose, it is recommended that the trailing edge of the tape (the edge that overlaps the previous wrap) lay down tightly. This will prevent a "shingle" effect on the outer radius. Tape should be applied at room temperature or warmer.

**Processing**

FUSA-FLEX® 76593 requires 3 to 4 hours at 150°C (302°F), or 6 hours at 130°C (266°F). The higher temperature cure results in much shorter processing time, increased oven capacities, quick "turn around" times for repair jobs and less downtime on critical customer repairs. The lower curing temperature reduces the risk of thermal shock to magnet wire enamel.

**Availability**

FUSA-FLEX® 76593 material is available as standard 36-inch-wide rolls on 3-inch or 6-inch diameter cores. Slit width roll, cut sheets, special core sizes and non-standard lengths may be available upon request. This material and other insulating materials are available from Von Roll or from your local authorized distributor. For the name of your distributor or for more information about these products contact Von Roll USA, 200 Von Roll Drive, Schenectady, NY. (518) 344-7100.

Properties	Test norm	Unit	Value
Binder type			Epoxy/Polyester
Binder content		%	75
Total thickness	ASTM D374	mils (mm)	7.5 (0.19)
Elongation to break		%	20
Tear Strength		lb/in (N/cm)	65 (113)
Tensile Strength		lb/in (N/cm)	45 (78)
Dielectric Constant, 60 Hz, 77°F(25°C)		volt/mil (kV/mm)	5.0

### Shelf life and Storage

FUSA-FLEX® 76593 tape should exhibit no shelf life limitations when stored for periods of up to 6 months under normal storage conditions of 77°F (25°C) and 50% humidity or up to 12 months when stored under refrigeration, 45°F (7.2°C). It is recommended to store material in clean and dry conditions in the original packaging.

### Health and safety

Safety Data Sheets defining the known hazards and describing safety precautions appropriate for this product are available upon request from Von Roll USA, Inc., Schenectady, NY, (518) 344-7100 and/or [www.vonroll.com](http://www.vonroll.com). Similar information for solvents and other chemicals to be used with this product may be obtained from the appropriate supplier and used accordingly. We recommend following all hygiene and safety standards while processing material.

### Liability

The information on this data sheet and the chart above is to be understood as a guideline and has general information. It is not binding for VR and it justifies in no case any liability. VR reserves the right to change the information at any time. 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.