

Von Roll Isola USA, Inc.

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THERM-AL® H75

Product Description

THERM-AL® H75 is a series of high temperature polyester coated glass fabrics designed to offer the utmost in total physical toughness. Constructed of a specially formulated, fully cured polyester coating on a specially treated, finely woven glass cloth, these products are designed to exhibit very high crease tear resistance and exceptional flexibility.

This combination of properties imparts the THERM-AL® H75 series of products conformability characteristics not seen in ordinary glass substrates.

In addition, THERM-AL® H75 has proven thermal endurance in excess of 50,000 hours at 180°C in accordance with both ASTM D902 (Volatility Index of Coated Woven Glass Cloth) and ASTM D1830 (curved electrode), and meets requirements of MIL-I-17205C.

Application

The combination of flexibility and toughness, tear resistance and positive cut-through protection of glass; and compatibility with a wide variety of magnet wire coatings and impregnating varnishes suggests its use as a phase separator, coil wrapping tape, slot liner, barrier and bus bar tape. With VRI Pressure Sensitive Adhesive it may be used as a motor lead tie down and connector tape as well as thermal resistant transformer coil insulation in both primary and secondary phases

Its exceptionally smooth surface characteristics and retention of flexibility also suggest its use in mica laminates and flexible circuits.

UL Reference File No. E63933

Product Data

ASTM D 902

		Therm-al H75-5	Therm-al H75-7	Therm-al H75-10	Therm-al H75-15
Finished Thickness	Mils	5.0	7.0	10.0	15.0
Base Fabric Thickness	Inches	.004	.004	.004	.004
Approximate Weight	Lb./sqyd	.34	.48	.62	.97
Elmendorf Tear Strength, Warp	Grams	1600 +	1600+	1600+	1600+
Elmendorf Tear Strength, Fill	Grams	1000	1100	1200	1300
Elmendorf Tear Strength on Crease, Warp	Grams	1600+	1600+	1600+	1600+
Elmendorf Tear Strength on Crease, Fill	Grams	1000	1100	1200	1300
Gurley Stiffness, Warp	Milligrams	100	110	180	400
Gurley Stiffness, Fill	Milligrams	90	90	150	350
Dielectric Strength	Volts/mil	1600	1700	1700	1100
Dissipation Factor	60 Hz, 80 C	.035	.035	.035	.035
Thermal Rating	Curved Electrode	180°C	180°C	180°C	180°C
Thermal Conductivity	W/m-K	.21	.22	.23	.23

Shelf Life

Shelf life is in excess of one year when stored at room temperature.

Available Forms

These products are available as 36-yard rolls of slit tape from 1/2 inch wide on 1½-inch diameter cores; or as full width trimmed (36 inch) in 25, 50 and 100-yard rolls. Cut sheets, special core sizes and non-standard lengths are available on request.

Specifications

The properties shown are typical values and should not be used as the basis for preparing specifications. Contact Von Roll Isola for assistance in preparation of specifications for your specific application.

Safety Precautions

Material Safety Data Sheets (MSDS) defining the known hazards and describing safety precautions appropriate for this product are available upon request from Von Roll Isola.

Availability

THERM-AL® H75 and other Insulating Materials are available from Von Roll Isola or from your local authorized distributor. For the name of your distributor or for more information about these products contact Von Roll Isola USA, Inc. One West Campbell Road, Schenectady, New York, (518) 344-7100.

Von Roll Isola Inc. is an ISO 9001 registered company.

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