

Electrical Insulation Materials

Flexiso® PI FI 16000

Structure: Flexiso® PI FI 16000 is an electrical insulation film, which is made of polyimide.

Characteristics: Flexiso® PI FI 16000 is tight and tear proof and shows good electrical properties. This film has high and low temperature resistance and good chemical resistance. Flexiso® PI FI 16000 can be laminated, metalized, die-cut, formed and coated.

Application: Flexiso® PI FI 16000 is used for a variety of insulation functions in electrical engineering, e.g. for the insulation of cables and coil wires, transformer and condenser insulation, as well as wrapped insulation sleeve, as base material for flexible circuits and backing material for electrical insulation adhesive tape and sliding and separating foil.

Delivery Form: Flexiso® PI FI 16000 is supplied on rolls (to approx. 914 mm), as tapes (from 6 mm width) and as feathery tapes. Other formats, cuts, die-cut parts or formed parts for e.g., self-adhesive and manufactured are available on special request.

Storage Conditions: Flexiso® PI FI 16000 is unlimited storable under normal conditions (20 ° C, 50% humidity).

Thickness	0,012	0,025	0,05	0,075	0,10	0,125	0,150	0,20	0,225	0,250
Availability	○	●	●	●	●	●	●	●	○	○

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Flexiso® PI FI 16000

Property	Unit	Value					
		0.013	0.020	0.025	0.050	0.075	0.100
Thickness	mm	0.013	0.020	0.025	0.050	0.075	0.100
Density	g/cm ³	1.42	1.42	1.42	1.42	1.42	1.42
Area weight	g/m ²	1.83	28.4	35.5	71.0	106.5	142.0
Tensile strength	MPa	171	178	191	183	180	175
Elongation	%	72	97	100	105	110	101
Shrinking 30 min at 150°C	%	0.04	0.05	0.06	0.06	0.06	0.06
Shrinking 120 min at 200°C	%	0.08	0.09	0.15	0.15	0.15	0.15
Dielectric strength	MV/m	300	319	305	282	230	210
Volume resistivity	Ω.cm	1.5x10 ¹⁷	2.9x10 ¹⁵	7.8x10 ¹⁵	7.7x10 ¹⁵	7.2x10 ¹⁵	5.6x10 ¹⁵
Temperature resistance	°C	180	180	180	180	180	180

Property	Unit	Value					
		0.125	0.150	0.175	0.200	0.225	0.250
Thickness	mm	0.125	0.150	0.175	0.200	0.225	0.250
Density	g/cm ³	1.42	1.42	1.42	1.42	1.42	1.42
Area weight	g/m ²	177.5	213.0	248.5	284.0	319.5	355.5
Tensile strength	MPa	163	150	145	135	125	122
Elongation	%	100	105	110	105	95	66
Shrinking 30 min at 150°C	%	0.10	0.10	0.10	0.10	0.10	0.10
Shrinking 120 min at 200°C	%	0.15	0.15	0.15	0.15	0.15	0.15
Dielectric strength	MV/m	180	156	143	133	128	121
Volume resistivity	Ω.cm	4.9x10 ¹⁵	4.6x10 ¹⁵	3.9x10 ¹⁵	3.8x10 ¹⁵	3.8x10 ¹⁵	3.8x10 ¹⁵
Temperature resistance	°C	180	180	180	180	180	180

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Flexiso[®] PI FI 16000

Trademark information: Flexiso[®] is a registered trademark of the company Dr. Dietrich Müller GmbH, Germany.

Please note:

The information in this Technical Data Sheet is based on our present knowledge and experiences. It does not release the user from conducting their own trials and examinations to determine the suitability of the product for his intended use. A legally obligatory warranty of certain characteristics or the suitability for a specific targeted application cannot be derived from our data. Depending upon individual cases we recommend consultation with us. Any patent rights as well as existing laws are to be considered by the receiver of our products as their own responsibility.

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