

Electrical insulation material

3M™ TufQUIN 120 | FI 15120

Description: 3M™ TufQUIN 120 | FI 15120 is a hybrid inorganic-organic paper.

Properties: 3M™ TufQUIN 120 | FI 15120 is made with a modified manufacturing process which yields thicker constructions while maintaining its conformability. 3M™ TufQUIN 120 | FI 15120 exhibits a rougher surface and a softer hand in comparison to 3M™ TufQUIN 110 | FI 15110. Other than that 3M™ TufQUIN 120 | FI 15120 offers physical toughness and good thermal conductivity.

Application: 3M™ TufQUIN 120 | FI 15120 is used for dry type transformers, coils and reactors as ground, barrier, layer, end-turn and interwinding insulation, spiral and convolute tubing, motors and generators, wire and cable wrap and pressure sensitive tapes.

Delivery forms: 3M™ TufQUIN 120 | FI 15120 can be delivered on roll or tape, as customized cut or die cut part. Other delivery forms upon customers request.

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properties	Testmethod	Unit	Value			
Nominal thickness	D-645	mm	0,19	0,30	0,38	0,51
basis weight	D-202	g/m ²	190	348	429	597
Density		g/cc	0,99	1,14	1,12	1,17
tensile strength, lengthwise	D-828	N/cm	79	96	158	193
Tensile strength, crosswise	D-828	N/cm	37	44	77	96
elongation, lengthwise	D-828	%	14	14	14	15
Elongation, crosswise	D-828	%	11	11	12	12
Elmendorf tear, lengthwise	D-689	g	335	650	770	1110
		N	3,3	6,4	7,5	10,9
Elmendorf tear, crosswise	D-689	g	705	1600	1620	2005
		N	6,9	15,7	15,9	19,6
Dielectric breakdown strength	D-149	kV	1,0	2,3	2,7	4,0

Trademark information: 3M TufQUIN™ is a registered trademark of 3M™ Co., USA.

Please note:

The information in this data sheet is based on our current knowledge and experience. They do not disengage the fabricator and the user from own tests and inspections because of the plenty of possible effects. There is no judicial binding assurance of certain properties or of the qualification for a concrete application in our declaration. We recommend consulting us in individual cases. The acceptor of our products has to observe possible industrial property rights as well as present laws by himself.

Dr. Dietrich Müller GmbH