

## Electrical insulation material

### 3M™ThermaVolt AR | FI 15140

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**Description:** 3M™ThermaVolt AR | FI 15140 is an inorganic electrical insulation paper.

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**Properties:** 3M™ThermaVolt AR | FI 15140 combines the best of two technologies – inorganic and aramid. It exhibits excellent thermal conductivity and voltage endurance as well as strong mechanical and thermal properties.

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**Application:** 3M™ThermaVolt AR | FI 15140 can be used as major and minor ground insulation, core wrap, high-low barrier, interwinding and turn insulation and phase insulation.

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**Delivery forms:** 3M™ThermaVolt AR | FI 15140 can be delivered on roll or tape, as customized cut or die cut part. Other delivery forms upon customers request.

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## 3M™ThermaVolt AR | FI 15140

property	Test method	unit	Value						
			0,08	0,10	0,13	0,14	0,18	0,25	0,29
Nominal thickness	D-645	mm	0,08	0,10	0,13	0,14	0,18	0,25	0,29
Basis weight	D-202	g/m <sup>2</sup>	87	105	168	186	244	326	429
Density		g/cc	1,1	1,1	1,3	1,3	1,4	1,3	1,5
Tensile strength, MD	D-828	N/cm	44	91	126	123	142	172	236
Tensile strength, CD	D-828	N/cm	18	35	53	46	60	63	114
Elongation at break, MD	D-828	%	1,9	2,5	3,5	2,0	2,9	2,5	3,0
Elongation at break, CD	D-828	%	1,4	3,2	4,1	2,9	2,6	2,0	2,5
Elmendorf tear, MD	D-689	g	146	173	312	245	416	537	505
		N	1,4	1,7	3,1	2,4	4,1	5,3	4,9
Elmendorf tear, CD	D-689	g	362	530	780	775	1050	1448	110
		N	3,5	5,2	7,7	7,6	10,3	14,2	10,9
Dielectric breakdown strength	D-149	kV	0,85	0,98	1,5	2,4	2,8	3,8	6,5
Moisture absorption	D-644	%	<1	<1	<1	<1	<1	<1	<1
Available roll size		m <sup>2</sup>	910	680	545	495	390	270	240

**Trademark information:** 3M ThermaVolt™ 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.