

AraShield™ Aramid Paper

1. GENERAL INFORMATION

AraShield™ is a high-temperature insulation paper made of pure aramid fibers. It shows excellent high-temperature resistance, excellent electrical insulation properties, mechanical properties and flame retardancy, good flexibility, and good compatibilities with various insulating varnishes and is suitable for thermal classification up to 200°C according to IEC 60085.

AraShield™ can be used for all applications with sheet-type electrical insulation and high overload resistance and has a strong shock-resistibility. Other common applications are inter-turn insulation, interlayer insulation and inter-end insulation of various transformers (traction transformers, mine explosion-proof transformers, power transformers, reactors, rectifiers, etc.), as well as slot insulation, inter-turn insulation and gasket insulation of various motors (traction motors, hydropower motors, wind power motors, mining motors, metallurgy motors, ship motors and other motors) and power generators.

2. TECHNICAL VALUES

Nominal Thickness			[μm]	50	80	130	180
Area Weight	GB/T 451.2	[g/m ²]		41	63	116	174
Tightness	GB/T 451.3	[g/m ³]		0,70	0,79	0,87	0,95
Tensile Strength	MD	GB/T 1408.1	[N/cm]	39	61	128	205
	TD			18	30	62	105
Elongation	MD	GB/T 12914	[%]	6	6,5	7	9
	TD			5	5	5	7
Tear Resistance	MD	GB/T 455	[N/cm]	0,6	0,9	1,9	3,1
	TD			1,2	1,7	3,2	5
Volume Resistivity	GB/T 1409	[Ω*cm]		1,8x10 ¹⁵	1,9x10 ¹⁵	1,8x10 ¹⁵	1,8x10 ¹⁵
Dielectric Constant	GB/T 1409	-		1,5	1,6	2,3	2,5
Dielectric Dissipator Factor (50Hz)	GB/T 1409	-		4x10 ⁻³	5x10 ⁻³	6x10 ⁻³	6x10 ⁻³

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Nominal Thickness		[μm]	250	300	380
Area Weight	GB/T 451.2	[g/m ²]	249	318	390
Tightness	GB/T 451.3	[g/m ³]	0,96	0,98	0,99
Tensile Strength	MD	GB/T 1408.1	[N/cm]	255	341
	TD			470	
Elongation	MD	GB/T 12914	[%]	10	11
	TD			8	9
Tear Resistance	MD	GB/T 455	[N /cm]	3,8	5,7
	TD			7,0	10,8
Volume Resistivity	GB/T 1409	[Ω*cm]	1,8x10 ¹⁵	2,0x10 ¹⁵	2,0x10 ¹⁵
Dielectric Constant	GB/T 1409	-	2,8	3	3
Dielectric Dissipator Factor (50Hz)	GB/T 1409	-	7x10 ⁻³	9x10 ⁻³	9x10 ⁻³

3. STORAGE AND AVAILABILITY

- Shelf life is 18 months from EXW date in original packing and under normal conditions (room temperature, 50% relative humidity)
- Standard width is 914 mm; 1828 mm on request
- Available from 10 mm width upwards

4. NOTES

All statements, technical information, and recommendations contained in this document are based on tests or experience that we believe are reliable. However, many factors beyond our control can affect the use and performance of a product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluates the product to determine whether it is fit for a particular purpose and suitable for the user's method or application.

Values presented have been determined by standard test methods and are average values not meant to be used for specification purposes. Tolerances on thickness and area weight are +/- 15% if not stated differently.

All questions of warranty and liability relating to our products are governed by the terms of the respective sale subject, where applicable, to the prevailing law.

AraShield™ is a trademark of MaterialPartner Technische Werkstoffe GmbH.

5. VERSIONING

Rev. 6 dated 13/08/2026