

PFA / A

Intended for general use

Electrical			
Properties	Method	Conditions	Value
Dielectric constant	ASTM D 150	0.1 kHz 100 MHz	2.1 2.1
Dielectric strength	ASTM D 149	0.25 mm film 3.2 mm sheet	> 80 kV/mm 20 kV/mm
Dissipation factor	ASTM D 150	0.1 kHz 100 MHz	0.0001 0.0003
Volume resistivity	Internal	+90 °C	10 ¹⁶ Ω x cm

Physical			
Properties	Method	Conditions	Value
Density	ASTM D 792	-	2.15 g/cm ³
Elongation at break	IEC 60811-501	50 mm/min	200 %
Hardness	ASTM D 2240	-	60 D
Radiation resistance	IEC 60544	-	10 ⁴ Gy
Tensile strength	IEC 60811-1-1	50 mm/min	22 MPa
Water absorption	ASTM D 570	25 °C	< 0.03 %

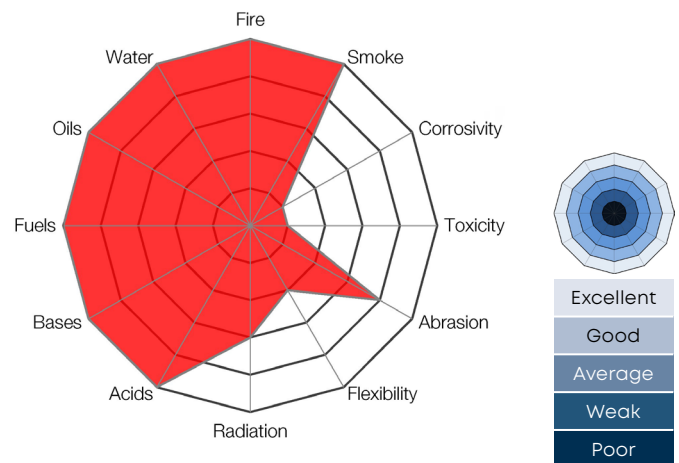
Thermal			
Properties	Method	Conditions	Value
Combustion corrosivity	DIN 57472-813	pH Conductivity	2.3 2700 μS/cm
Continuous temperature rating	IEC 60216	20,000 hrs	+ 260 °C
Flammability	UL 94	1.6 mm	V-0
Flame propagation	-	-	-
Oxygen index	ASTM D 2863	-	> 95 %
Smoke density	ASTM E 662	Flaming Non-flaming	< 10 < 10
Smoke index	-	-	-
Temperature index	Def Stan 02-715	-	> 400 °C
Toxicity index	-	-	-

Properties

PFA shares many of PTFE's exceptional properties but it can be processed by normal means, allowing for longer lengths and larger sizes that are possible with PTFE. PFA can also claim the best electrical properties with a low dielectric constant of 2.1.

With very good chemical properties; excellent fluid resistance and the ability to be processed with all standard copper conductors, only its relatively high cost prevents it from being more widely used. Although it is a halogenated material, it is highly flame retardant and generates very little smoke under fire conditions. PFA is also ideal for use where low out-gassing is required.

Important: Habia Cable has compiled the information contained herein from what it believes to be accurate and factual sources as of the date printed. Data is based on typical values and might vary depending on cable construction and processing method. Any changes in the data will be made without notification.



Available colours (shades may vary from material to material)



Characteristics and key properties

Intended use Insulation	Intended use Small / Inner sheath	Intended use Outer sheath					Temp installation -200°C	Temp low -75°C	Temp >20,000 hrs +260°C	Temp peak +260°C
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