

HFI 150 / B

Intended for use in nuclear applications

Electrical			
Properties	Method	Conditions	Value
Dielectric constant	ASTM D 150	0.1 kHz 10 MHz	3.0 2.7
Dielectric strength	ASTM D 149	In air: 3.2 mm In oil: 3.2 mm	16.0 kV/cm 16.2 kV/cm
Dissipation factor	ASTM D 150	0.1 kHz 10 MHz	0.01 0.03
Volume resistivity	Internal	25 °C 90 °C	10 ¹⁶ Ω x cm 10 ¹⁴ Ω x cm

Physical			
Properties	Method	Conditions	Value
Density	ASTM D 792	-	1.2 g/cm ³
Elongation at break	IEC 60811-501	50 mm/min	100 %
Hardness	ASTM D 2240	-	60 D
Radiation resistance	IEC 60544	-	> 10 ¹⁶ Gy
Tensile strength	IEC 60811-501	50 mm/min	25 MPa
Water absorption	ASTM D 570	-	0.12 %

Thermal			
Properties	Method	Conditions	Value
Combustion corrosivity	DIN 57472-813	pH Conductivity	5.7 100 μS/cm
Continuous temperature rating	IEC 60216	20,000 hrs	+ 135 °C
Flammability	UL 94	3.2 mm	V-0
Flame propagation	IEC 60332-1-2	Dependent on cable design	Pass
Oxygen index	ASTM D 2863	-	45 %
Smoke density	NF X 10-702	Flaming Non flaming	178 25
Smoke index	Def Stan 61-12 02-711	per m wire	4
Temperature index	Def Stan 61-12 02-715	-	> 350 °C
Toxicity index	Def Stan 61-12 02-713	per m wire	0.07

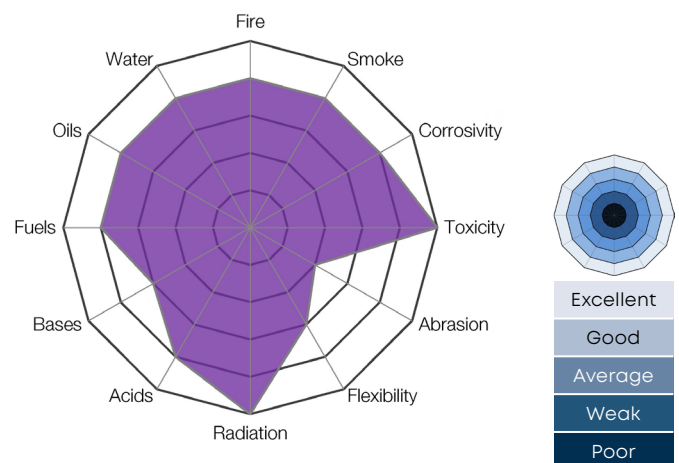
Properties

HFI 150 was developed primarily for the nuclear industry and exhibits excellent radiation resistance.

Despite being a relatively thin-wall material it can be processed up to quite large sizes (50mm²).

HFI 150 is a Halogen Free Flame Retardant (HFFR) material with good all-round mechanical performance and a reasonably wide temperature range.

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	Intended use	Intended use					Temp installation	Temp low	Temp >20,000 hrs	Temp peak
Insulation	Small / Inner sheath	Outer sheath					-60°C	-60°C	+135°C	+135°C

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