Habia Cable

PTFE / E

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	0.38 mm	24 kV/mm
Dissipation factor	ASTM D 150	0.1 kHz 100 MHz	0.0001 0.0002
Volume resistivity	Internal	90 °C	10^16 Ω x cm

Physical			
Properties	Method	Conditions	Value
Density	ASTM D 792	-	2.2 g/cm³
Elongation at break	IEC 60811-501	50 mm/min	300 %
Hardness	ASTM D 2240	-	58 D
Radiation resistance	IEC 60544	-	10^3 Gy
Tensile strength	IEC 60811-501	50 mm/min	32 MPa
Water absorption	ASTM D 570	-	< 0.01 %

Thermal			
Properties	Method	Conditions	Value
Combustion corrosivity	DIN 57472-813	pH Conductivity	2.2 4100 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	-	-	-

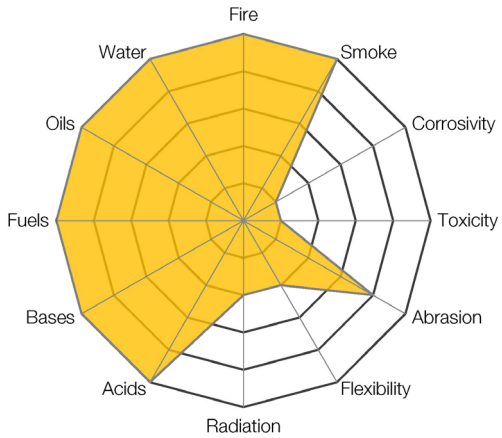
Properties

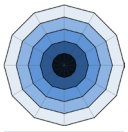
PTFE is unique amongst the fluoropolymer materials as it processed by either cold ram-extrusion or tape-wrapping and is then sintered at high temperatures to set the material.

PTFE has the best electrical properties of any plastic material with a low dielectric constant of 2.1 that does not change with temperature or frequency. With very good chemical properties and excellent fluid resistance, only alkali metals and the most corrosive of chemicals under high pressures / temperatures will attack PTFE.

Although it is a halogenated material, it is highly flame retardant and generates very little smoke under fire conditions.

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.





Excellent
Good
Average
Weak
Poor

Available colours (shades may vary from material to material)											
Black	Brown	Red	Orange	Yellow	Green	Blue	Violet	Grey	White	Pink	Clear

Characteristics and key properties										
Intended use Insulation	**Intended** use Small / Inner sheath						**Temp** installation **-200°C**	**Temp** low **-75°C**	**Temp** >20,000 hrs **+260°C**	**Temp** peak **+260°C**