

**TRISTAR® PC-10FRN-(V18) BK**

PC

Amco Polymers

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Melt Flow Index, MFI	18	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Tensile Strength at Yield	58.6	MPa	ASTM D 638
Elongation at Break	75	%	ASTM D 638
Flexural Modulus	2137	MPa	ASTM D 790
Rockwell Hardness	R 120	-	ASTM D 785
Izod Impact notched, 1/8 in	587	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	125	°C	ISO 75-1/-2
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	2.5	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	777	°C	IEC 60695-2-13
<b>ASTM Data</b>			
UL 94 Flame rating	V-0	-	UL 94
Thickness tested	1.52	mm	-
Coefficient of Thermal Expansion, MD	70.2	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	68.4	E-6/K	ASTM D 696
DTUL @ 66 psi	134	°C	ASTM D 648
Limiting Oxygen Index	38	%	ASTM D 2863

Electrical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Dielectric Strength, Short Time	24	kV/mm	ASTM D 149
Volume Resistivity	3E15	Ohm*cm	ASTM D 257
Arc Resistance	90	s	ASTM D 495
<b>Other Standards<sup>[S]</sup></b>			
Comparative tracking index	325	-	UL 746A

S: These properties are reported by the producer according standards that are different to our defaults.

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	0.18	%	ASTM D 570
Density	1230	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	121	°C	-
Pre-drying - Time	4	h	-
Melt temperature	282 - 304	°C	-
Mold temperature	71.1 - 93.3	°C	-
Zone 1	254 - 274	°C	-
Zone 2	266 - 277	°C	-
Zone 3	277 - 293	°C	-
Nozzle temperature	271 - 293	°C	-
Injection pressure	75.8 - 124	MPa	-
Back pressure	0.345 - 1.38	MPa	-

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Additives**

Release agent

**Special Characteristics**

Flame retardant, U.V. stabilized or stable to weather

**Certifications**

RoHS compliant

**Applications**

Electrical and Electronical

**Regional Availability**North America, Europe, Asia Pacific, South and Central America,  
Near East/Africa