

PTS Tristar® PC-10FRN 15 MFI Flame Retardant Polycarbonate With Release

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Unreinforced, Flame Retardant

Material Notes:

Information provided by Polymer Technology and Services, LLC (PTS).

Order this product through the following link:

http://www.lookpolymers.com/polymer_PTS-Tristar-PC-10FRN-15-MFI-Flame-Retardant-Polycarbonate-With-Release.php

Physical Properties	Metric	English	Comments
Density	1.23 g/cc	0.0444 lb/in ³	ASTM D792
Water Absorption	0.18 %	0.18 %	24 hours at 73°F; ASTM D570
Melt Flow	15 g/10 min @Load 1.20 kg, Temperature 300 °C	15 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	120	120	ASTM D785
Tensile Strength, Yield	62.1 MPa @Thickness 3.17 mm	9000 psi @Thickness 0.125 in	ASTM D638
Elongation at Break	75 % @Thickness 3.17 mm	75 % @Thickness 0.125 in	ASTM D638
Flexural Yield Strength	89.6 MPa @Thickness 3.17 mm	13000 psi @Thickness 0.125 in	ASTM D790
Flexural Modulus	2.21 GPa @Thickness 3.17 mm	320 ksi @Thickness 0.125 in	ASTM D790
Izod Impact, Notched	5.87 J/cm @Thickness 3.17 mm	11.0 ft-lb/in @Thickness 0.125 in	ASTM D256
Tensile Impact Strength	443 kJ/m ² @Thickness 3.17 mm	211 ft-lb/in ² @Thickness 0.125 in	ASTM D1822

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	70.2 µm/m-°C @Temperature -40.0 - 95.0 °C	39.0 µin/in-°F @Temperature -40.0 - 203 °F	ASTM E831-06
	68.4 µm/m-°C	38.0 µin/in-°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Transverse to Flow	@ Temperature -40.0 - 95.0 °C	@ Temperature -40.0 - 203 °F	ASTM E821-06
Deflection Temperature at 0.46 MPa (66 psi)	135 °C	275 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	134 °C	273 °F	ISO 75
UL RTI, Electrical	125 °C	257 °F	
UL RTI, Mechanical with Impact	115 °C	239 °F	
UL RTI, Mechanical without Impact	125 °C	257 °F	
Flammability, UL94	V-0	V-0	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	5VA	5VA	Black, Gray, Beige
	@Thickness 2.50 mm	@Thickness 0.0984 in	
	5VA	5VA	
	@Thickness 3.00 mm	@Thickness 0.118 in	
Oxygen Index	37.6 %	37.6 %	ASTM D2863
Glow Wire Test	775 °C	1430 °F	GWIT
	960 °C	1760 °F	GWFI

Electrical Properties	Metric	English	Comments
Arc Resistance	60 - 120 sec	60 - 120 sec	PLC 6
Comparative Tracking Index	250 - 400 V	250 - 400 V	PLC 2
Hot Wire Ignition, HWI	15 - 30 sec	15 - 30 sec	PLC 3
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	15 - 30 sec	15 - 30 sec	PLC 3
	@Thickness 2.50 mm	@Thickness 0.0984 in	
	30 - 60 sec	30 - 60 sec	PLC 2
	@Thickness 3.00 mm	@Thickness 0.118 in	
High Amp Arc Ignition, HAI	60 - 120 arcs	60 - 120 arcs	PLC 1
	@Thickness 2.50 mm	@Thickness 0.0984 in	
	60 - 120 arcs	60 - 120 arcs	PLC 1
	@Thickness 3.00 mm	@Thickness 0.118 in	

Electrical Properties	Metric arcs	English arcs	Comments
	@Thickness 1.50 mm	@Thickness 0.0591 in	PLC 3
High Voltage Arc-Tracking Rate, HVTR	80.0 - 150 mm/min	3.15 - 5.91 in/min	PLC 3

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	254 - 274 °C	490 - 525 °F	
Middle Barrel Temperature	266 - 277 °C	510 - 530 °F	
Front Barrel Temperature	277 - 293 °C	530 - 560 °F	
Nozzle Temperature	271 - 293 °C	520 - 560 °F	
Melt Temperature	282 - 304 °C	540 - 580 °F	
Mold Temperature	71.1 - 93.3 °C	160 - 200 °F	
Drying Temperature	121 °C	250 °F	
Dry Time	4 hour	4 hour	
Injection Pressure	75.8 - 124 MPa	11000 - 18000 psi	
Back Pressure	0.345 - 1.38 MPa	50.0 - 200 psi	

Descriptive Properties	Value	Comments
Edge Gate	Slow to Medium	
Tab Gate	Medium to Fast	
Tunnel Gate	Fast	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China