

Premix Thermoplastics PRE-ELEC® PP 1397 Conductive Thermoplastic Compound

Category : Polymer , Thermoplastic , Polypropylene (PP) , Polypropylene with Carbon Black Filler

Material Notes:

PRE-ELEC® PP 1397 is a conductive thermoplastic compound based on polypropylene. Conductivity is achieved by using special conductive carbon black. In addition to a low electrical resistivity PRE-ELEC® PP 1397 has excellent mechanical properties and is easy to extrude. Applications: Extrusion of corrugated sheet. Processing: PRE-ELEC® PP 1397 compound can be extruded in the machines using normal processing conditions as with polypropylene. Test Specimen: 10[mm] wide moulded rod Information from Premix OY

Order this product through the following link:

http://www.lookpolymers.com/polymer_Premix-Thermoplastics-PRE-ELEC-PP-1397-Conductive-Thermoplastic-Compound.php

Physical Properties	Metric	English	Comments
Density	0.980 g/cc	0.0354 lb/in³	
Thickness	102 microns	4.00 mil	
Linear Mold Shrinkage	0.013 - 0.019 cm/cm	0.013 - 0.019 in/in	ISO 294-4
Melt Flow	1.2 g/10 min	1.2 g/10 min	ISO 1133
	@Load 2.16 kg, Temperature 230 °C	@Load 4.76 lb, Temperature 446 °F	
	6.0 g/10 min	6.0 g/10 min	ISO 1133
	@Load 5.00 kg, Temperature 230 °C	@Load 11.0 lb, Temperature 446 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	99	99	ISO 868
Hardness, Shore D	74	74	ISO 868
Film Tensile Strength at Yield, MD	23.0 MPa	3340 psi	ISO 527
	@Thickness 0.400 mm	@Thickness 0.0157 in	
Film Tensile Strength at Yield, TD	22.0 MPa	3190 psi	ISO 527
	@Thickness 0.400 mm	@Thickness 0.0157 in	
Film Elongation at Break, MD	500 %	500 %	ISO 527
	@Thickness 0.400 mm	@Thickness 0.0157 in	
Film Elongation at Break, TD	480 %	480 %	ISO 527
	@Thickness 0.400 mm	@Thickness 0.0157 in	
	17 %	17 %	

Film Elongation at Yield, MD Mechanical Properties	Metric @ Thickness 0.400 mm	English @ Thickness 0.0157 in	ISO 527 Comments
Film Elongation at Yield, TD	16 % @ Thickness 0.400 mm	16 % @ Thickness 0.0157 in	ISO 527
Flexural Modulus	1.40 GPa	203 ksi	ISO 178
Izod Impact, Notched (ISO)	NB @ Thickness 4.00 mm, Temperature 23.0 °C	NB @ Thickness 0.157 in, Temperature 73.4 °F	ISO 180
	NB @ Thickness 4.00 mm, Temperature -20.0 °C	NB @ Thickness 0.157 in, Temperature -4.00 °F	ISO 180
Izod Impact, Unnotched (ISO)	NB @ Thickness 4.00 mm, Temperature 23.0 °C	NB @ Thickness 0.157 in, Temperature 73.4 °F	ISO 180
	NB @ Thickness 4.00 mm, Temperature -20.0 °C	NB @ Thickness 0.157 in, Temperature -4.00 °F	ISO 180
Charpy Impact Unnotched	NB @ Thickness 102 mm, Temperature 23.0 °C	NB @ Thickness 4.00 in, Temperature 73.4 °F	ISO 179
	NB @ Thickness 102 mm, Temperature -20.0 °C	NB @ Thickness 4.00 in, Temperature -4.00 °F	ISO 179
Charpy Impact, Notched	1.80 J/cm ² @ Thickness 102 mm, Temperature -20.0 °C	8.57 ft-lb/in ² @ Thickness 4.00 in, Temperature -4.00 °F	ISO 179
	4.50 J/cm ² @ Thickness 102 mm, Temperature 23.0 °C	21.4 ft-lb/in ² @ Thickness 4.00 in, Temperature 73.4 °F	ISO 179
Film Tensile Strength at Break, MD	25.0 MPa @ Thickness 0.400 mm	3630 psi @ Thickness 0.0157 in	ISO 527
Film Tensile Strength at Break, TD	23.0 MPa @ Thickness 0.400 mm	3340 psi @ Thickness 0.0157 in	ISO 527

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	90.0 °C	194 °F	75/Method Bf

Thermal Properties Deflection Temperature at 1.8 MPa (264 psi)	Metric	English	Comments
Vicat Softening Point	151 °C	304 °F	ISO 306/A50

Electrical Properties	Metric	English	Comments
Volume Resistivity	<= 1000 ohm-cm @Thickness 0.400 mm	<= 1000 ohm-cm @Thickness 0.0157 in	ISO D-257
Surface Resistance	<= 10000 ohm @Thickness 0.400 mm	<= 10000 ohm @Thickness 0.0157 in	ISO IEC 61340-5-1

Processing Properties	Metric	English	Comments
Zone 1	210 °C	410 °F	Cylinder
	230 °C	446 °F	Die
Zone 2	220 °C	428 °F	Cylinder
	230 °C	446 °F	Die
Zone 3	220 °C	428 °F	Die
	220 °C	428 °F	Cylinder
Zone 4	230 °C	446 °F	Die
	230 °C	446 °F	Cylinder
Zone 5	230 °C	446 °F	Die
	230 °C	446 °F	Cylinder
Roll Temperature	60.0 °C	140 °F	3rd Roll
	80.0 °C	176 °F	2nd Roll
	90.0 °C	194 °F	1st Roll
Drying Temperature	60.0 - 80.0 °C	140 - 176 °F	Pre-drying
Dry Time	2 - 4 hour	2 - 4 hour	
Shelf Life	12.0 Month	12.0 Month	Normal Storing Conditions

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