

Premix Thermoplastics PRE-ELEC® PE 1200 Conductive Thermoplastic Compound

Category : Polymer , Thermoplastic , Polyethylene (PE) , HDPE

Material Notes:

PRE-ELEC® PE 1200 is a conductive thermoplastic masterbatch/compound based on PE-HD. Conductivity is achieved by using special conductive carbon black. PRE-ELEC® PE 1200 has a high concentration of carbon black and has been developed to be used as a masterbatch. PRE-ELEC® PE 1200 can be diluted up to 50% with natural or recycled HDPE. The actual amount should always be tested as it also depends on the processing parameters. PRE-ELEC® PE 1200 can be used in blow moulding of bottles and canisters or in extrusion of sheets, profiles, pipes etc. Processing: PRE-ELEC® PE 1200 compound blended with HDPE can be processed in the blow moulding machines using normal processing conditions as with high density polyethylene. 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-PE-1200-Conductive-Thermoplastic-Compound.php

Physical Properties	Metric	English	Comments
Density	1.12 g/cc	0.0405 lb/in ³	
Thickness	102 microns	4.00 mil	
Linear Mold Shrinkage	0.025 - 0.035 cm/cm	0.025 - 0.035 in/in	ISO 294-4
Melt Flow	1.0 g/10 min @Load 21.6 kg, Temperature 190 °C	1.0 g/10 min @Load 47.6 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	95	95	ISO 868
Hardness, Shore D	65	65	ISO 868
Tensile Strength	17.0 MPa	2470 psi	ISO 527
Tensile Strength, Yield	29.0 MPa	4210 psi	ISO 527
Elongation at Break	27 %	27 %	ISO 527
Elongation at Yield	13 %	13 %	ISO 527
Flexural Modulus	1.30 GPa	189 ksi	ISO 178
Izod Impact, Notched (ISO)	15.0 kJ/m ² @Thickness 4.00 mm, Temperature -20.0 °C	7.14 ft-lb/in ² @Thickness 0.157 in, Temperature -4.00 °F	ISO 180
	25.0 kJ/m ²	11.9 ft-lb/in ²	

Mechanical Properties	Metric	English	ISO 180 Comments
	@Thickness 4.00 mm, Temperature 23.0 °C	@Thickness 0.157 in, Temperature 73.4 °F	
Izod Impact, Unnotched (ISO)	NB	NB	ISO 180
	@Thickness 4.00 mm, Temperature 23.0 °C	@Thickness 0.157 in, Temperature 73.4 °F	
	NB	NB	ISO 180
	@Thickness 4.00 mm, Temperature -20.0 °C	@Thickness 0.157 in, Temperature -4.00 °F	
Charpy Impact Unnotched	NB	NB	ISO 179
	@Thickness 102 mm, Temperature 23.0 °C	@Thickness 4.00 in, Temperature 73.4 °F	
	NB	NB	ISO 179
	@Thickness 102 mm, Temperature -20.0 °C	@Thickness 4.00 in, Temperature -4.00 °F	
Charpy Impact, Notched	1.10 J/cm ²	5.23 ft-lb/in ²	ISO 179
	@Thickness 102 mm, Temperature -20.0 °C	@Thickness 4.00 in, Temperature -4.00 °F	
	2.30 J/cm ²	10.9 ft-lb/in ²	ISO 179
	@Thickness 102 mm, Temperature 23.0 °C	@Thickness 4.00 in, Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	80.0 °C	176 °F	75/Method Bf
Deflection Temperature at 1.8 MPa (264 psi)	46.0 °C	115 °F	75/Method Af
Vicat Softening Point	58.0 °C	136 °F	ISO 306/B50
	126 °C	259 °F	ISO 306/A50

Electrical Properties	Metric	English	Comments
Volume Resistivity	<= 1000 ohm-cm	<= 1000 ohm-cm	ISO D-257
Surface Resistance	<= 1e+05	<= 1e+05	ISO IEC 61340-5-1

Processing Properties	Metric	English	Comments
Zone 1	200 °C	392 °F	Cylinder
	240 °C	464 °F	Die

Zone 2 Processing Properties	210 °C Metric	410 °F English	Cylinder Comments
	230 °C	446 °F	Die
Zone 3	220 °C	428 °F	Die
	220 °C	428 °F	Cylinder
Zone 4	220 °C	428 °F	Cylinder
	230 °C	446 °F	Die
Zone 5	230 °C	446 °F	Cylinder
	240 °C	464 °F	Die
Roll Temperature	50.0 °C	122 °F	3rd Roll
	60.0 °C	140 °F	2nd Roll
	70.0 °C	158 °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