

Item Description

Item ID

PRE-ELEC[®] PE 17800
PE17800

PE-LD concentrate
Electrically conductive

Typical end product
Foam

Applications
Sheets

PRE-ELEC[®] PE 17800 is a conductive thermoplastic concentrate based on LDPE. Conductivity is achieved by using special conductive carbon black. Up to 35% of virgin LDPE can be used to dilute the concentrate. The actual ratio of the polymers should always be tested as it also depends on the processing conditions. This product is designed to be used as a base for foaming applications, and does not contain any chemical foaming agents itself.

Special properties	Unit	Value	Method
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Volume resistivity(*)	Ω.cm	2	PRE021
Surface resistance(*)	Ω	3E+02	IEC 61340-2-3

General properties	Unit	Value	Method
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Density(*)	g/cm ³	1.15	ISO 1183
Melt flow rate at 190°C 10.0 kg	g/10 min	1	ISO 1133

Mechanical properties	Unit	Value	Method
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Stress at break(*)	MPa	16	ISO 527
Strain at break(*)	%	100	ISO 527

MFR is measured from granulates.

(* extruded tape; ISO 527-2 Type 1B, thickness 400 - 800 µm)

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Processing instructions

Extrusion

	Unit	Processing range		
Cylinder temperature profile	°C	160	-	200
Die temperature profile	°C	190	-	200
Tool/Roll temperature	°C	70	-	50

Notes

Drying of the product is recommended for 1-2 hours at 60-65°C prior to use.

These parameters are for guidance only. The process parameters should always be optimized for the used equipment. The instructions of the equipment manufacturer should be followed. Caution should be taken when handling molten material as it is extremely hot and may cause severe burns. Overheated material can be cooled with e.g. water.

Storage

Product-specific details are mentioned in the notes above. The general minimum shelf life for Premix's product is 3 years with the following conditions: 1) original package is unopened, 2) the storage area and conditions provide protection from direct sunlight and significant changes in storage temperature, 3) the product is pre-dried accordingly before use.

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