

# Item Description

## Item ID

PRE-ELEC<sup>®</sup> PE 17800  
PE17800

PE-LD concentrate  
Electrically conductive

Typical end product  
Applications

Foam  
Sheets

PRE-ELEC<sup>®</sup> PE 17800 is a conductive thermoplastic concentrate based on LDPE. Conductivity is achieved by using special conductive carbon black. It can be diluted up to 35% with natural LDPE. 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.

The values with the exception of MFR are measured from dilution: foam concentrate

Special properties	Unit	Value	Method
Volume resistivity(*)	$\Omega \cdot \text{cm}$	2	PRE021
Surface resistance(*)	$\Omega$	3E+02	IEC 61340-2-3
General properties	Unit	Value	Method
Specific gravity	$\text{g/cm}^3$	1.15	ISO 1183
Melt flow rate at 190°C 10.0 kg	$\text{g/10 min}$	1	ISO 1133
Mechanical properties	Unit	Value	Method
Tensile strength(*)	MPa	16	ISO 527
Tensile strain at break(*)	%	100	ISO 527

MFR is measured from granulates

Test specimen: injection moulded rod; Thickness: 10 mm, width: 4 mm

\*) extruded tape; Thickness 600-800  $\mu\text{m}$

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[www.premixgroup.com/data-center/](http://www.premixgroup.com/data-center/)

### Processing instructions

		Unit	Processing range		
Extrusion	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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**PRE-ELEC<sup>®</sup> is a registered trademark of Premix.**

Contact our Sales and Customer Service teams for more information

[www.premixgroup.com/contact](http://www.premixgroup.com/contact)

[precise@premixgroup.com](mailto:precise@premixgroup.com)

[www.premixgroup.com](http://www.premixgroup.com)