

# PRE-ELEC<sup>®</sup> PE 17840

PE-LLD concentrate  
Electrically conductive

Applications: Blown film  
Layflat tubing

PRE-ELEC<sup>®</sup> PE 17840 is a conductive thermoplastic polyolefin concentrate based on LLDPE. Conductivity is achieved by using special conductive carbon black. It contains a high concentration of carbon black and has been developed to be used as a masterbatch. Dilution rate of 65% can be achieved depending on the required conductivity level. The actual amount should always be tested as it also depends on the processing parameters.

The values with the exception of MFR are measured from dilution: 40% LDPE, MFI 0,25 (190°C/2,16 kg)

Special properties	Unit	Value	Method
Volume resistivity(*)	Ω.cm	0,7 (100% PE17840)	PRE021
General properties	Unit	Value	Method
Specific gravity	g/cm <sup>3</sup>	1,20	ISO 1183
Melt flow rate at 230°C 21.6 kg	g/10 min	4,5	ISO 1133
Mechanical properties	Unit	Value	Method
Tensile strength(*)	MPa	26	ISO 527
Yield strength(*)	MPa	22	ISO 527
Tensile strain at break(*)	%	500	ISO 527
Tensile strain at yield(*)	%	45	ISO 527

MFR is measured from granulates

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

\*) blown film: Thickness 60 µm

# PRE-ELEC<sup>®</sup> PE 17840

This product is REACH and RoHS compliant

Visit Premix Data Center for more detailed information of our products at [www.premixgroup.com/data-center-main](http://www.premixgroup.com/data-center-main)

## Processing instructions

		Unit	Processing range	
Extrusion	Cylinder temperature profile	°C	200	- 220
	Die temperature profile	°C	210	- 220
	Tool/Roll temperature	°C	90	- 60

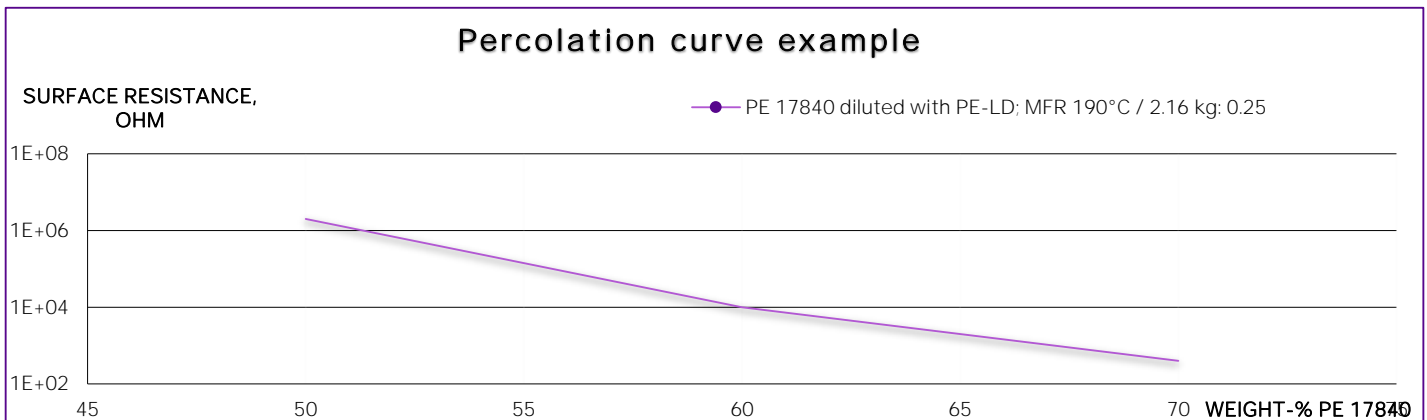
## Notes

Drying of the product is recommended for 2-4 hours at 80-90°C prior to use.

Processing conditions as with filled PE-LLD. 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.

## 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.



The information in this datasheet represents typical values obtained by us, and shall not be regarded as a product specification. The right to make any changes to the content and appearance of this document is reserved by Premix Oy. We condition that the product will be inspected and qualified by the customer for their process to meet the specific requirements set by application, processing equipment and the end product. The user of this product is held responsible for the evaluation of this product's suitability concerning applied legislation and possible patent infringements. We do not intentionally add or incorporate hazardous substances in our production.

PRE-ELEC<sup>®</sup> is a registered trademark of Premix.

PE 17840-120

Contact our Sales and Customer Service teams for more information

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

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

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