

# Item Description

## Item ID

PRE-ELEC<sup>®</sup> PE 17693  
PE17693

POE concentrate  
Electrically conductive  
Flexible

Typical end product  
Flextubes

Applications  
Profiles

PRE-ELEC<sup>®</sup> PE 17693 is a conductive flexible thermoplastic concentrate based on polyolefin elastomer with good low temperature properties. The conductivity is achieved by using special conductive carbon black. In addition to a low electrical resistivity, the product has excellent mechanical properties and is easy to extrude.

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

Special properties	Unit	Value	Method
Volume resistivity(* - See percolation curve)	Ω.cm	1,4	PRE021
General properties	Unit	Value	Method
Density(*)	g/cm <sup>3</sup>	1,06	ISO 1183
Melt flow rate at 190°C 21.6 kg	g/10 min	11	ISO 1133
Mechanical properties	Unit	Value	Method
Tensile strength(*)	MPa	19,6	ISO 527
Tensile strain at break(*)	%	700	ISO 527
Tensile modulus(*)	MPa	300	ISO 527
Hardness, Shore D(*)	-	52	ISO 868

MFR is measured from granulates.

Test specimen: Injection moulded rod; ISO 527 TYPE 1A; Thickness: 10 mm, width: 4 mm

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

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Processing instructions

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

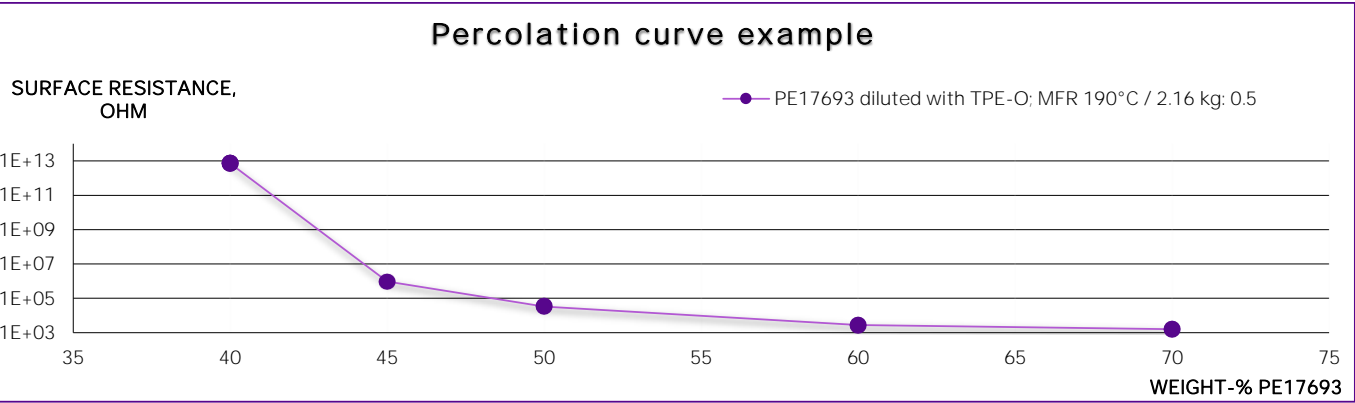
Notes

Drying of the product is recommended for 2-3 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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