

Item Description Item ID

PRE-ELEC[®] PP 18220 Preliminary PP18220

PP extrusion compound
Flexible
Electrically conductive

Typical end product
Applications

Conductive screen
Tubes
Sheets

PRE-ELEC[®] PP 18220 is a conductive flexible thermoplastic compound based on polypropylene 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.

Special properties	Unit	Value	Method
Volume resistivity(*)	Ω.cm	63	PRE021
General properties	Unit	Value	Method
Specific gravity	g/cm ³	0,99	ISO 1183
Melt flow rate at 230°C 10.0 kg	g/10 min	3,6	ISO 1133
Mechanical properties	Unit	Value	Method
Tensile strength(*)	MPa	13,5	ISO 527
Tensile strain at break(*)	%	826	ISO 527
Flexural modulus(*)	MPa	222	ISO 178
Tensile modulus	MPa	255	ISO 527
Unnotched, -20°C		63 (NB)	
Notched, -20°C		7,8	
Hardness, Shore D(*)	-	45	ISO 868

MFR is measured from granulates

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

*) extruded tape; Thickness 600-800 µm

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www.premixgroup.com/data-center-main

Processing instructions

	Unit	Processing range
Extrusion		
Cylinder temperature profile	°C	170 - 210
Die temperature profile	°C	180 - 230
Tool/Roll temperature	°C	90 - 60

Notes

Drying of the product is recommended for 2-4 hours at 60-80°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.

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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