

Item Description

Item ID

PRE-ELEC[®] PE 1271
PE1271

PE-LD extrusion compound
Electrically conductive

Typical end product
Applications

Blown film
Layflat tubing

PRE-ELEC[®] PE 1271 is a carbon black filled conductive thermoplastic compound based on a blend of PE-LD/PE-LLD. In addition to a low electrical resistivity, it has an excellent balance of mechanical properties and is easy to extrude and blow mold.

Special properties	Unit	Value	Method
Volume resistivity(*)	Ω.cm	70	PRE021
Surface resistance(*)	Ω	5E+03	IEC 61340-2-3
General properties	Unit	Value	Method
Specific gravity	g/cm ³	1,02	ISO 1183
Melt flow rate at 190°C	g/10 min		ISO 1133
5.0 kg		1,7	
21.6 kg		35	
Mechanical properties	Unit	Value	Method
Tensile strength(*)	MPa	24	ISO 527
Yield strength(*)	MPa	21	ISO 527
Tensile strain at break(*)	%	590	ISO 527
Tensile strain at yield(*)	%	13	ISO 527

MFR is measured from granulates

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

*) blown film: Thickness < 100 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 80°C prior to use.

Blow ratio should be higher than 1.8 and the use of coarse screen pack is recommended. 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. Also 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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