Technical Datasheet

Item Description
PRE-ELEC® PP 19161

Item ID
PP19161

PP injection moulding compound
Electrically conductive

Typical end product
Applications

Boxes,Crates
Technical parts

PRE-ELEC® PP 19161 is a conductive thermoplastic compound based on polypropylene. Conductivity is achieved by using special conductive carbon black. In addition to a low electrical resistivity, it has an excellent balance of mechanical properties and is easy to injection mould.

Special properties	Unit	Value	Method
Volume resistivity	Ω.cm	90	PRE021
Surface resistance	Ω	4E+03	IEC 61340-2-3

General properties	Unit	Value	Method
Specific gravity	g/cm3	1,02	ISO 1183
Melt flow rate at 230°C	g/10 min		ISO 1133
2.16 kg		3,4	
Mould shrinkage	%	1,5	ISO 294-4

Mechanical properties	Unit	Value	Method
Tensile strength	MPa	15	ISO 527
Tensile strain at break	%	18	ISO 527
Flexural modulus	MPa	1208	ISO 178
Tensile modulus	MPa	1320	ISO 527
Impact strength, Charpy	kJ/m2		ISO 179
Unnotched, +23°C		NB	
Notched, +23°C		66	
Hardness, Shore A	-	95	ISO 868
Hardness, Shore D	-	65	ISO 868

MFR is measured from granulates
Test specimen: injection moulded rod; Thickness: 10 mm, width: 4 mm

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www.premixgroup.com/data-center/

Processing instructions

Injection moulding

	Unit	Processing range		
Material temperature	°C	200	-	260
Mould temperature	°C	40	-	80
Injection pressure	Bar	600	-	800
Injection speed				moderate

Notes

Drying of the product is recommended for 2-3 hours at 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.

Contact our Sales and Customer Service teams for more information
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