

Item Description

Item ID

PE16006

PE-HD injection moulding compound Typical end product
Electrically conductive Applications

Thin walled parts
Pails
Lids

PRE-ELEC® PE16006 is a conductive thermoplastic compound based on PE-HD. Conductivity is achieved by using special conductive carbon black. In addition to a low electrical resistivity PRE-ELEC®PE 16006 has an excellent balance of mechanical properties and is easy to injection mould.

Special properties	Unit	Value	Method
Surface resistance	Ω	<1E07	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
2.16 kg		2,0	
5.0 kg		8	
10.0 kg		23	

Mechanical properties	Unit	Value	Method
Tensile strength	MPa	15	ISO 527
Yield strength	MPa	24	ISO 527
Tensile strain at break	%	270	ISO 527
Tensile strain at yield	%	8	ISO 527
Flexural modulus	MPa	1000	ISO 178
Tensile modulus	MPa	1400	ISO 527
Impact strength, Charpy	kJ/m ²		ISO 179
Unnotched, +23°C		NB	
Notched, +23°C		63	
Unnotched, -20°C		22	
Notched, -20°C		5	

MFR is measured from granulates

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

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Processing instructions

	Unit	Processing range
Injection moulding		
Material temperature	°C	210 - 250
Mould temperature	°C	40 - 80
Injection pressure	Bar	750 - 1200
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.

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