

PRE-ELEC[®] PS 1328

PS injection moulding compound
Electrically conductive

Applications: Boxes, Crates
Cases

PRE-ELEC[®] PS 1328 is a conductive thermoplastic compound based on polystyrene. 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 extrude or injection mould.

Special properties	Unit	Value	Method
Volume resistivity	Ω.cm	60	PRE021
Surface resistance	Ω	1E+03	IEC 61340-2-3

General properties	Unit	Value	Method
Specific gravity	g/cm ³	1.10	ISO 1183
Melt flow rate at 200°C	g/10 min		ISO 1133
5.0 kg		3.0	
21.6 kg		70.0	
Mould shrinkage	%	0.4 - 0.6	ISO 294-4
Vicat, Rate A	°C	97	ISO 306/A50
HDT, 0.45 MPa	°C	83	ISO 75/Bf
HDT, 1.80 MPa	°C	70	ISO 75/ Af

Mechanical properties	Unit	Value	Method
Tensile strength	MPa	28	ISO 527
Yield strength	MPa	23	ISO 527
Tensile strain at break	%	20	ISO 527
Tensile strain at yield	%	8	ISO 527
Flexural modulus	MPa	2200	ISO 178
Impact strength, Charpy	kJ/m ²		ISO 179
Unnotched, +23°C		35	
Notched, +23°C		5	
Unnotched, -20°C		30	
Notched, -20°C		3	
Hardness, Shore A	-	> 90	ISO 868
Hardness, Shore D	-	79	ISO 868

MFR is measured from granulates

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

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This product is REACH and RoHS compliant

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Processing instructions

	Unit	Processing range	
Injection moulding			
Material temperature	°C	240	- 270
Mould temperature	°C	40	- 80
Injection pressure	Bar	750	- 1200
Injection speed			moderate

Notes

Drying of the product is recommended for 3-4 hours at 60-80°C prior to use.

Processing conditions as with filled PS. 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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