

## PRE-ELEC® PS 18014

PS injection moulding compound Electrically conductive Applications:

Reels

Boxes, Crates

Cases

PRE-ELEC® PS 18014 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 injection mould.

Special properties	Unit	Value	<u> Method</u>
Volume resistivity	Ω.cm	90	PRE021
Surface resistance	Ω	4E+03	IEC 61340-2-3
General properties	Unit	Value	Method
Melt flow rate at 200°C	g/10 min		ISO 1133
5.0 kg		6	
Mould shrinkage	%	0.4 - 0.6	ISO 294-4
Vicat, Rate A	°C	91	ISO 306/A50
HDT, 0.45 MPa	°C	82	ISO 75/Bf
Mechanical properties	Unit	Value	Method
Tensile strength	MPa	19	ISO 527
Tensile strain at break	%	30	ISO 527
Flexural modulus	MPa	1500	ISO 178
Impact strength, Charpy	kJ/m2		ISO 179
Unnotched, +23°C		NB	
Notched, +23°C		10	
Hardness, Shore A	-	>90	ISO 868
Hardness, Shore D	-	73	ISO 868



## PRE-ELEC® PS 18014

This product is REACH and RoHS compliant

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Processing instructions

		Unit	Processing range	
Injection moulding				
	Material temperature	°C	200 - 2	250
	Mould temperature	°C	30 - 7	70
	Injection pressure	Bar	600 - 1	1200
	Injection speed		r	moderate

## Notes

Drying of the product is recommended for 2-4 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.

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