

Item Description

Item ID

PRE-ELEC[®] TP 6735E ISCC 75% bc
TP6735EISCC75bc

PP injection moulding compound
Electrically conductive

Typical end product
Pipette tip

Applications
Technical parts

PRE-ELEC[®] TP 6735 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. The material utilizes ISCC certified materials made from bio-circular feedstock.

Special properties	Unit	Value	Method
Volume resistivity	$\Omega \cdot \text{cm}$	< 20	PRE021
Surface resistance	Ω	9E+02	IEC 61340-2-3
ISCC Content	%	75	Mass Balance

General properties	Unit	Value	Method
Density	g/cm ³	1	ISO 1183
Melt flow rate at 230°C	g/10 min		ISO 1133
2.16 kg		16	
Mould shrinkage	%	1.2 - 1.5	ISO 294-4
Vicat, Rate A	°C	154	ISO 306/A50
Vicat, Rate B	°C	90	ISO 306/B50
HDT, 0.45 MPa	°C	97	ISO 75/Bf
HDT, 1.80 MPa	°C	57	ISO 75/Af

Mechanical properties	Unit	Value	Method
Tensile strength	MPa	26	ISO 527
Tensile strain at break	%	4	ISO 527
Flexural modulus	MPa	1500	ISO 178
Impact strength, Charpy	kJ/m ²		ISO 179
Unnotched, +23°C		NB	
Notched, +23°C		15	
Unnotched, -20°C		NB	
Notched, -20°C		6	
Hardness, Shore A	-	> 90	ISO 868
Hardness, Shore D	-	72	ISO 868



MFR is measured from granulates.

Test specimen: injection moulded rod; ISO 527 TYPE 1A; Thickness: 10 mm, width: 4 mm

Item Description
Item ID

PRE-ELEC[®] TP 6735E ISCC 75% bc
TP6735EISCC75bc

Visit Premix Data Center for more detailed information of our products at
www.premixgroup.com/data-center/

Processing instructions

		Unit	Processing range		
Injection moulding					
	Material temperature	°C	200	-	250
	Mould temperature	°C	60	-	80
	Injection pressure	Bar	600	-	800
	Injection speed				moderate

Notes

Drying of the product is recommended for 2-4 hours at 90°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.

The information in this datasheet represents typical values obtained by us, and shall not be regarded as a product specification. The right to make any changes to the content and appearance of this document is reserved by Premix Oy. We condition that the product will be inspected and qualified by the customer for their process to meet the specific requirements set by application, processing equipment and the end product. The user of this product is held responsible for the evaluation of this product's suitability concerning applied legislation and possible patent infringements. We do not intentionally add or incorporate hazardous substances in our production.

PRE-ELEC[®] TP 6735E ISCC 75% bc is a registered trademark of Premix.