



## **TECHNICAL DATA SHEET**

## **CONDUCTIVE FILAFLEX**

## Description

CONDUCTIVE FILAFLEX is a Thermoplastic Polyurethane elastomer electrically conductive which makes it suitable for wearable devices and other flexible electronics applications.

Physical properties	Value	Unit	Test method according to
Material density	<u>1.35</u>	g/cm <sup>3</sup>	ISO 1183
Mechanical properties	Value	Unit	Test method according to
<u>Hardness</u>	<u>92</u>	Shore A	<u>DIN 53505 – ISO 868</u>
Tensile modulus (Young)	<u>90</u>	<u>MPa</u>	ISO 527
Notched impact strength (Charpy) at +23°C	<u>NB</u>	kJ/m²	<u>ISO 179</u>
Elongation at break	<u>&gt;100</u>	<u>%</u>	ISO 527
Electrical properties	Value	Unit	Test method according to
Electrical Resistivity surface	<u>&lt;1E1</u>	<u>ohm</u>	ASTM D 257
Electrical Resistivity	<u>3.9</u>	<u>Ω-cm</u>	Approx.
Printing properties	Recommended		
Printing temperatures	<u>245-250°C</u>		
Printing speed	20 mm/s		
Hot-bed temperature	<u>50-60°C</u>		
Retractions	2-3 mm/s to 40 mm/s		

**Printing speed** should be lower as recommended to get a perfect printing. After each change of material the extruder must be cleaned.

The information provided here is for reference only because the raw materials are from different sources. We request that customers inspect and test our products before using them to satisfy themselves as to contents and suitability.