PLASTICYL™ PBT1501 / Product Data Sheet

General Information

Description

PLASTICYL™ is a family of Multi-Wall Carbon Nanotube (MWNT) thermoplastic concentrates for applications requiring superior electrical conductivity and electrostatic discharge (ESD) properties. PLASTICYL™ PBT1501 is a conductive masterbatch based on polybutylene terephthalate. Because of its high flow formulation, PLASTICYL™ PBT1501 is ideal for standard injection molding and extrusion processes.

Applications

- ESD (Electrostatic Discharge) and electrically conductive parts
- E&E, automotive, industrial
- Injection molding, extrusion

Benefits

- Electrical conductivity at low loading
- Retention of key mechanical properties
- Easier processing

Main Characteristics

CARBON NANOTUBES LOADING (%$_{WT}$)	REAL DENSITY (G/L) ISO 1183	MFI (G/10 MIN) NON-STANDARD TEST : 250°C ; 20 KG ; 4 MM	MELTING POINT (°C) ISO 11357-1,-3
15 ± 1,0	1300	0,88	227

Typical Performance after Dilution

	STANDARD	UNITS	NEAT PBT	DILUTION TO 3 %$_{WT}$ OF CNT	DILUTION TO 5 %$_{WT}$ OF CNT
Melt flow index *(250°C; 2,160kg*; 5 kg**)*	ISO 1133:1997	g/10 min	-	3.76*	5,51**

N.B.: Compounds were processed using an L/D ratio and a 48 twin-screw extruder using proprietary conditions.

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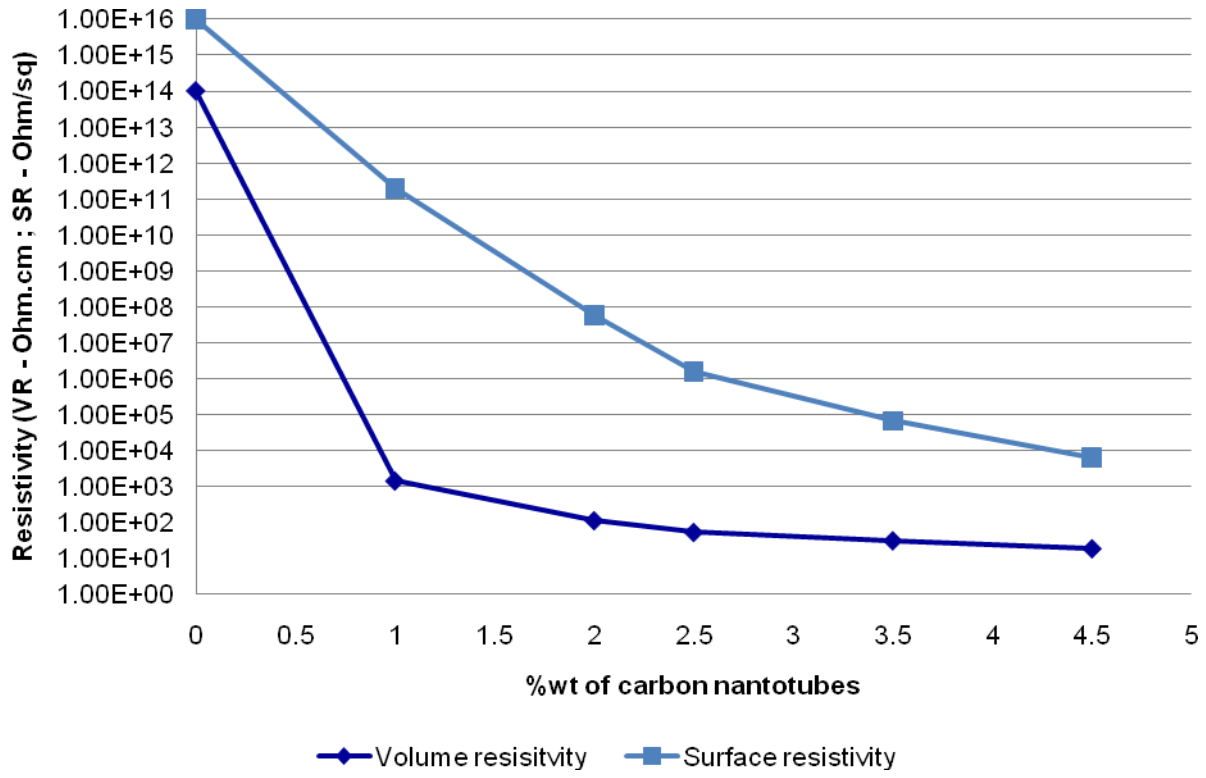
Percolation Curves for Volume and Surface Resistivity



N.B.: Electrical resistivity measurement in accordance to CTM E043 and CTM E402 (Cabot Testing Method), on standard injection molded IZOD specimens.

Disclaimer

This information is intended to be used only as a guideline for designers and users of modified thermoplastics. All information is believed to be accurate but is given without acceptance of liability. Users should make their own assessment of the suitability of the product for the purposes required. Properties may be materially affected by extrusion and molding parameters as well as by the shape and size of the part. No information supplied by Nanocyl constitutes a warranty regarding the product performance.

For technical assistance, sales or further information, please contact us :

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