

PLASTICYL™

CNT thermoplastic concentrates

PLASTICYL™ LDPE2001

Low Density Polyethylene – carbon nanotubes masterbatches

General Information

Description

PLASTICYL™ is a family of multiwall carbon nanotubes (MWCNTs) thermoplastic concentrates for applications requiring superior electrical conductivity and electrostatic discharge (ESD) properties.

PLASTICYL™ LDPE2001 is a conductive masterbatch based on Low Density Polyethylene (LDPE) loaded with 20% of Nanocyl's MWCNTs (NC7000™). Because of its low viscosity and high flow, PLASTICYL™ LDPE2001 is ideal for injection molding and extrusion processes.

Key Applications

- Electrostatic discharge (ESD) and electrically conductive parts
- Electrical and Electronics (E&E), automotive and industrial
- Injection molding, extrusion
- Packaging, containers.

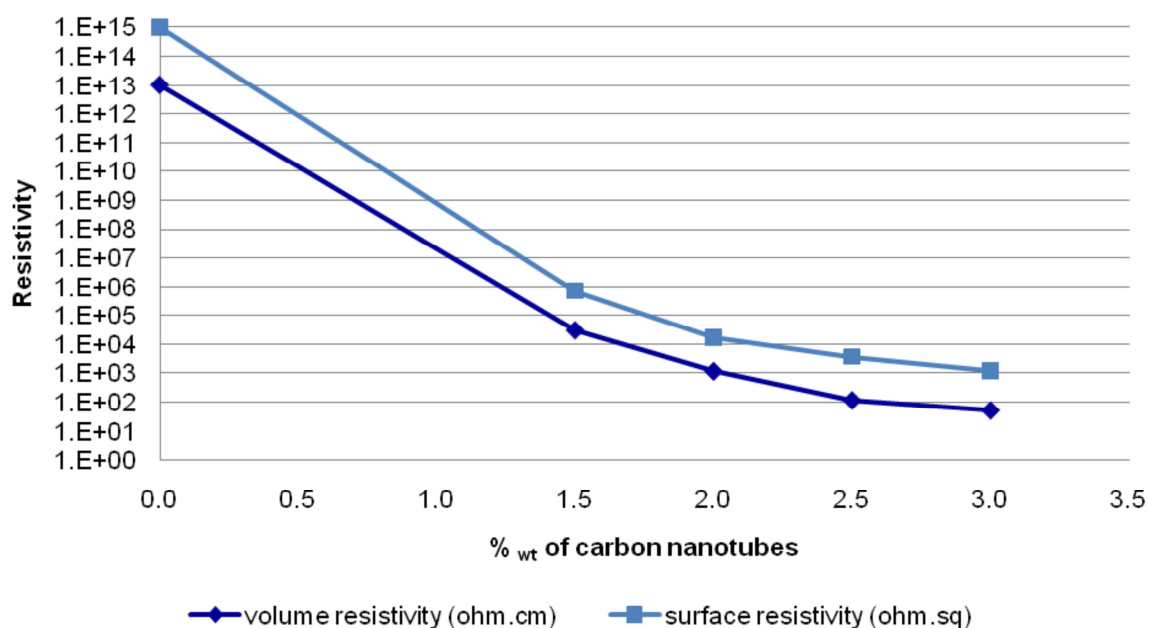
Benefits

- Excellent electrical conductivity at low loading
- Retention of key mechanical properties
- Ease of processing

Main Characteristics

CARBON NANOTUBES LOADING (% _{WT})	REAL DENSITY (G/L) ISO 1183	MFI (G/10 MIN) NON-STANDARD TEST : 190°C ; 21,6 KG ; 4 MM
20 ± 1,0	930	10,1 ± 2,1

Electrical percolation curve for volume and surface resistivity



Electrical resistivity measurement in accordance with Nanocyl standard method based on standard injection molded IZOD specimens, processed according to parameters provided before (General Processing Guide for Injection Molding).

In order to get well-dispersed CNT aggregates, Nanocyl recommends the use of polymers with a high Melt Flow Index (MFI). Surface Resistivity results can be significantly influenced by molding/extrusion conditions.

Commercial/Safety Information

Packaging

PLASTICYL™ LDPE2001 masterbatches (pellets) are available in different packaging:

- 20 kg sealed white plastic bags,
- 600 kg cardboard octabins.

Minimum Order Quantity

Nanocyl's minimum order quantity for PLASTICYL™ LDPE2001 is 20 kg.

Custom Grades

Besides the commercial grades, Nanocyl is able to toll-compound any type of LDPE masterbatches to meet its clients' needs.

Health and Safety

A Material Safety Data Sheets (MSDS) is available to provide both workers and emergency personnel with the proper procedures for handling or working with the PLASTICYL™ LDPE2001. This MSDS includes information such as physical data (form and color, melting point, etc.), handling and storage recommendations, first aid measures and ecological information. The Safety Data Sheet is provided with any order and should be observed.

Disclaimer

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