



THE CARBON NANOTUBE SPECIALIST

NANO-ENGINEER YOUR FUTURE

PLASTICYL

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PLASTICYL™ HDPE1501 Technical Data Sheet

General Information

Description

PLASTICYL™ is a family of Multi-Wall Carbon Nanotubes (MWNT) thermoplastic concentrates for applications requiring superior electrical conductivity and electrostatic discharge (ESD) properties. PLASTICYL™ HDPE1501 is a conductive masterbatch based on high density polyethylene. Because of its high flow, PLASTICYL™ HDPE1501 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, blow molding
- Conductive containers

Benefits

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

Technical Data

Main Characteristics

CARBON NANOTUBES LOADING (% _{WT})	REAL DENSITY (G/L) ISO 1183	MFI (G/10 MIN) NON-STANDARD TEST : 260°C ; 20 kg ; 4 mm	MELTING POINT (°C) ISO 11357-1,-3
15 ± 1,0	977	7,84	135

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Typical Performance after Dilution

	STANDARD	UNITS	NEAT HDPE	DILUTION TO 2 % _{WT} OF CNT	DILUTION TO 4 % _{WT} OF CNT
<i>Melt flow index</i> (300°C ; 1,2 kg* ; 2.160 kg**)	ISO 1133:1997	g/10 min	-	3,53*	1,97**

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

Commercial/Safety Information

Packaging

- 5 kg boxes.
- 25 kg sealed bags.
- 600 kg octabins.

Minimum Order Quantity

Nanocyl's minimum order quantity for PLASTICYL™ HDPE1501 is 5 kg.

Custom Grades

Besides the commercial grades, Nanocyl is able to toll-compound any type of HDPE 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™ HDPE1501. 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.

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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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