RESEARCH GRADES
Carbon Nanotubes

Research grades NC3100™

Purified multiwall carbon nanotubes

General Information

Description

NANOCYL® NC3100™ series, multiwall carbon nanotubes, are produced via the Catalytic Chemical Vapor Deposition (CCVD) process and then purified up to 95 wt.%.

Key Applications

A primary interest is in applications requiring high level of purity.

Benefits

- High electrical conductivity
- High level of purity

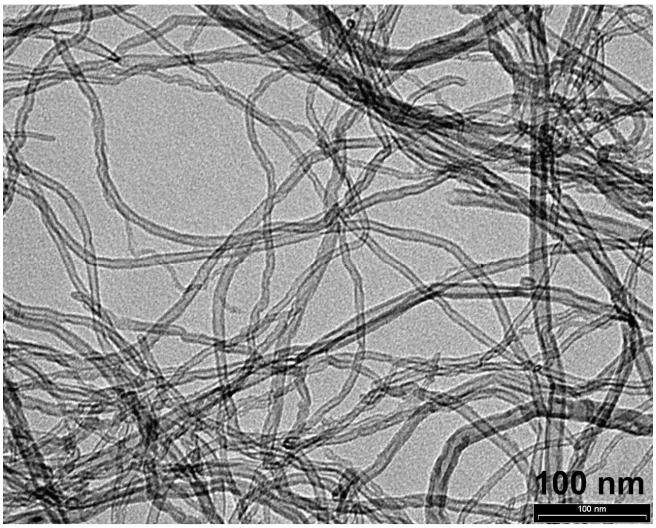
Technical Data

Main Characteristics

NANOCYL® NC3100™ series (Figure 1), multiwall carbon nanotubes are produced via the Catalytic Chemical Vapor Deposition (CCVD) process.

Multiwall carbon nanotubes which exit the reactor are then purified to greater than 95% carbon to produce the 3100 grade.

Figure 1. NC3100™ multiwall carbon nanotubes – scale: 100 nm - TEM.



Specific characterization of NC3100™

PROPERTIES	UNIT	VALUE	METHOD OF MEASUREMENT
Average diameter	10^{-9} m	9.5	High resolution Transmission Electron Microscopy (HRTEM)
Average length	µm	1.5	Transmission Electron Microscopy (TEM)
Carbon purity	%	> 95.0	Thermogravimetric analysis (TGA)
Metal oxide	%	< 5.0	Thermogravimetric analysis (TGA)
Amorphous carbon	%	*	High resolution Transmission Electron Microscopy (HRTEM)

* Pyrolytically deposited carbon on the surface of the CNT

Commercial/Safety Information

Packaging

NC3100™ multiwall carbon nanotubes (powder) are available in bottle with double caps (1g to 1 kg).

Minimum Order Quantity

Nanocyl's minimum order quantity for NC3100™ is 1 g.

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 NC3100™. 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

www.nanocyl.com

info@nanocyl.com
+32 (0)71 75 03 80

Nanocyl SA
Rue de l'Essor N°4
B-5060 Sambreville
Belgium