

# CARBON NANOTUBES (CNT)



## TECHNICAL DATA SHEET

### 1. PRODUCT INFORMATION:

Product Name: carbon nanotubes (CNT).

Description: They are constituted by hexagonal carbon networks curved and closed, forming nanometric carbon tubes, they are light, hollow and porous systems that have high mechanical strength, high tensile strength and enormous elasticity, they have a transport capacity estimated at one billion amperes per square centimeter.

Uses: Pharmaceutical, electronics, aeronautics, space, biotechnology, and chemical industries.

### 2. PHYSICAL AND CHEMICAL PROPERTIES:

Presentation: black powder.

Appearance: Structure formed by carbon atoms in a cylindrical shape.

Form: Powder.

Physical states: Solid.

Color: Black.

Odor: Odorless.

Boiling Point: Not applicable.

Melting Point: Estimated 3652-3697 ° C (subl/VAC).

Size of the Particle: 0.6-1.8 nm.

Density: at 20 ° C to 2.1 g / cm<sup>3</sup>.

Solubility: Poor solubility.

Vapor Pressure: Not applicable.

Stability: Stable product under normal storage conditions in original sealed container.

### 3. CHEMICAL COMPOSITION:

Carbon in the CNT form: 100% in inert atmosphere.

#### 4. PRESENTATION AND STORAGE:

Format of presentation:



Net weight: 1 gram

Gross weight: 4 grams

Internal Environment: Sealed in Argon (Inert Atmosphere)

Storage Conditions: Keep in a hermetically sealed container, stored in a cool, dry and ventilated place. Protect against shock or physical damage. Empty containers of this material can be hazardous because they retain product residues (e.g. as they retain product residues (dust, solids). Look for all warnings and precautions detailed in the product safety data sheets (MSDS).

#### 5. HANDLING:

Requirements: Safety equipment for handling slightly irritating dusts: goggles, gloves, closed shoes, apron or coveralls and dust metal masks for powdered metal.

Recommendations: Avoid contact with eyes, skin and clothing. If eye and skin irritation occur, flush with water. If discomfort persists, take the injured to a nearby medical facility and show the physician the MSDS. Avoid any ingestion of product, this may cause gastrointestinal disturbances such as vomiting, nausea, cramps and diarrhea of a mildly irritating nature and abdominal pain, accumulation in liver, lung and spleen, lung inflammation and granulomas.

#### 6. CHEMICAL COMPOSITION:

International standard: IMO, IATA, IMDG CODE.

Hazard identification:

