

1.- Identification of the substance/preparation and of the company

- **Identification of the product:** Funcionalized carbon nanotubes
- **Chemical family:** Synthetic Graphite
- **Product name:** DRP-SWCNTCOOH (Single-wall carbon nanotubes carboxylic acid functionalized)
DRP-MWCNTNH₂, MWCNTCOOH (Multi-wall carbon nanotubes amide functionalized and carboxylic acid functionalized)
- **Use of the substance/preparation:** Research use only
- **Manufacturer/supplier identification:** DropSens, S.L.
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2 Hazards identification

Hazards classification for the substance according to the European directives:

- According to Regulation CLP (EC) No1272/2008:
Eye Irritation (Category 2);
Specific target organ toxicity- single exposure (Category 3).



- Signal word: Warning
- Hazards statement(s):
H319 Causes serious eye irritation
H335 May cause respiratory irritation
- Precautionary statement(s):
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P305+ P351+ P338 If contact with eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Physical hazards:

Carbon Nanotubes are electrically conductive. Care should be taken.

3.- Composition/Information on ingredients

- **Carbon Nanotubes functionalized** **Synonyms:** Carbon nanotubes
Concentration ≤ 100%
CAS: -

4.- First aid measures

- **After inhalation:** Move the person into fresh air. If it is necessary, give artificial respiration with oxygen. Summon physician if necessary.
- **After skin contact:** Wash skin with soap and copious amounts of water. Consult a physician.
- **After ingestion:** Make victim drink plenty of water. Never give anything by mouth to an unconscious

- person, rinse mouth with water. Consult a physician.
- **After eye contact:** Rinse out with plenty of water with the eyelid held wide open for at least 15 minutes. Summon eye specialist.
- **In case of persisting adverse effects:** Consult a physician.
- **General:** Show this safety data sheet to the doctor in attendance.

5.- Fire-fighting measures

- **Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- **Special hazards arising from the substance:** Carbon dioxide and carbon monoxide. May form toxic fumes.
- **Special protective equipment for fire fighting:** Wear self contained breathing apparatus for fire fighting if necessary.

6.- Accidental release measures

- **Person-related precautionary measures:** Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
- **Environmental precautions:** Do not discharge into the drains/surface waters/groundwaters.
- **Procedures for cleaning/absorption:** Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7.- Handling and storage

- **Handling:** Avoid eye and skin contact. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
- **Storage:** Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8.- Exposure controls/personal protection

Exposure controls

- Respiratory protection Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- Hand protection The selected protective gloves have to satisfy the specification of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.
- Eye protection Safety glasses with side-shields conforming to EN166.
- Skin and body protection Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9.- Physical and chemical properties

- **General information:**
 - Form: powder
 - Colour: black
- **Important health, safety and environmental information:**
 - pH value: not determined.
 - Melting point: no data available
 - Boiling point: no data available
 - Ignition temperature: no data available
 - Water solubility: no soluble (20°C)
 - Solubility in other solvent: No determined.

10.- Stability and reactivity

- **Conditions to be avoided:** Heating should be avoid.
- **Substances to be avoided:** Strong oxidizing agents and/or reducing agents.
- **Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions.

- **Further information:** Stable under recommended storage conditions.

11.- Toxicological information

- **Acute toxicity:**
 - **Carcinogenicity:** No sign of carcinogenicity. No carcinogenic response. Method: 2-year bioassay in the peritoneal cavity of the rat
 - **IARC:** No component of this product, present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **Further toxicological information**
 - **After skin contact:** No irritation and no corrosion. Method: Modified OECD 431.
 - **After eye contact:** Irritations.
 - **After inhalation:** May cause respiratory irritation
 - **After ingestion:** No effect. Method: Modified OECD 420.

12.- Ecological information:

- **Mobility:** no data available.
- **Bioaccumulative potential:** no data available.
- **Persistence and degradability:** no data available.
- **Other adverse effects:** no data available.

13.- Disposal considerations

- **Product:** Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
- **Packaging:** Dispose of as unused product.

14.- Transport information

- **Road transport:** - Not dangerous goods
- **Sea transport:** - Not dangerous goods
- **Air transport:** - Not dangerous goods

15.- Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) 1907/2006 and/or 67/548/EEC and/or 1999/45/EC.

- **R-phrases:**
R36/37 Irritating to eyes and respiratory system.
- **S-phrases:**
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36 Wear suitable protective clothing

16. Other information

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The contents and format of this MSDS are in accordance with EEC Commission Directive 2001/58/EC, 67/548/EC resp. 99/45/EC

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