

EC safety data sheet according to Regulation (EG) Nr. 1907/2006 (changed by EU (EU) Nr. 453/2010)

Current version: 25.03.2024
Issued: -
Replaced version: 27.03.2024
Issued: 1.0
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1. Identification of the substance or mixture and of the company

1.1 Product identifier

Substance name/Trade name: Carbon nanotube, multi-walled

Index-Nr.: C

Identification numbers:

EG-No.: 608-533-6

CAS-No.: 308068-56-6

REACH registration number: A registration number is unavailable for this substance due to exemptions from registration, the annual tonnage falling below registration requirements, or registration being planned for a later deadline.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture:

Laboratory chemicals

Manufacture of substances

Uses advised against: None known

1.3 Details of the supplier of the safety data sheet

Producer / Supplier:

ProGraphite GmbH
Dr.-Schindler-Str. 9
94107 Untergriesbach
Germany
Telefon +49 (0)8593 9383 188
Mobil +49 (0)160 7586 976
info@pro-graphite.com

1.4 Emergency telephone number

+49 (0)8593 9383 188

+49 (0)160 7586 976

Monday to Friday: 8:00 – 18:00 h

2. Hazards identification

2.1 Classification of the substance or mixture

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP). This product does not meet the classification and labelling criteria given in the Dangerous Preparations Directive 67/548/EC (DSD).

2.2 Label elements

Not relevant and not required.

2.3 Other Hazards

Slightly irritating on inhalation, skin and eye contact. Further hazards unknown.

This substance/mixture contains no components considered to be either persistent,

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bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Additional hazard notes for human and environment:

Unknown

3. Composition/information on ingredients

3.1 Substances

Chemical characterization:

Substance name: Multiwall carbon nanotube (MWNT)
Chemical characterisation: C

Identification numbers:

EG-No.: 608-533-6
CAS-No.: 308068-56-6

REACH registration number A registration number for this substance is not available because the substance or its use is exempted from registration, the annual tonnage does not require registration or registration is foreseen for a later date.

In accordance with the relevant legislation, no components need to be notified.

4. First aid measures

4.1 Description of first aid measures

General information:

In case of persisting symptoms and adverse effects, consult a physician. In case of unconsciousness, handling and transport in recovery position.

After inhalation:

Remove affected person from the immediate area. Ensure supply of fresh air and respiration.

After skin contact:

Clean affected skin with plenty of water and soap.

After eye contact:

Wash the eyes with running water. Remove contact lenses. Consult an ophthalmologist if adverse symptoms persist.

After ingestion:

Rinse out mouth with water. Make victim drink water (two glasses at most). Never give anything by mouth to an unconscious person.

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4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms are listed in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. Firefighting measures

5.1 Extinguishing media

Water spray jet, extinguishing powder, alcohol-resistant foam, sand, carbon dioxide.

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO₂).
Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Use self-contained breathing apparatus if necessary

5.4 Additional information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Avoid dust formation. Avoid inhalation of vapour and dust. Avoid contact with skin, eyes and clothing. High risk of slipping due to leakage/spillage of product. Evacuate the danger area, observe emergency procedures.

For emergency responders:

Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Not required

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Sweep up or use a suitable vacuum cleaner. Clean up affected area. Avoid generation of dusts.

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7. Handling and storage

7.1 Precautions for safe handling

Avoid inhalation of dust, contact with eyes, skin and clothing. Avoid prolonged or repeated exposition. Use respiratory protection.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry.

Storage category 13 (TRGS 510): Non-combustible solids

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls/personal protection

8.1 Control parameters

Components with workplace-related exposure limits that require monitoring

Contains no substances with occupational exposure limits.

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8.1.2 DNEL- und PNEC- values

Not applicable

8.2 Exposure controls

8.2.1 Technical measures for exposure control

Processing and handling in closed facility, if possible. Ensure good ventilation of workplace.
Aspiration of dust right at point of origin.

8.2.2 Individual measures for exposure control - Personal protective equipment



Respiratory protection:

In case of dust exposure, a respiration protection (respiration filter mask type P1 (EN 143)) must be worn. Use respiratory masks and components tested and approved under government standards such as NIOSH (US) or CEN (EU).



Eye / face protection:

In case of dust exposure use safety glasses with integrated side protection shield according to DIN (EN 166). Only use safety glasses or other eye protection equipment tested and approved under government standards such as NIOSH (US) or CEN (EU).



Hand protection:

The use of safety gloves complying with directive 89/686/EWG and European Standard EN 374 is advised in the event of frequent skin contact with the product. Recommended safety gloves, e.g., nitrile rubber, 0.11mm thickness, breakthrough time of 480 minutes.

Body protection:

No additional requirements.

Workplace hygiene:

Avoid inhalation of dust.

8.2.3 Environmental exposure controls

Do not discharge into the drains/surface waters/groundwater.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state	Solid
b) Appearance/form	flaky particels, black
c) Odour	odourless
d) Geruchsschwelle	No data available
e) pH-value	No data available
f) Melting point	Melting range 3652-3697°C (lit.)

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g) Boiling point	No data available
h) Flashpoint	No data available
i) Evaporation rate	No data available
j) Flammability	No data available
k) Upper and lower explosion limit	No data available
l) Vapour pressure	No data available
m) Vapour density	No data available
n) Density	No data available
o) Water solubility	Insoluble
p) Distribution coefficient n-Octanol/Water	No data available
q) Auto-ignition temperature	No data available
r) Decomposition temperature	No data available
s) Viscosity	No data available
t) Explosive properties	No data available
u) Oxidising properties	No data available

9.2 Other information

No further information of security relevant parameters necessary.

10. Stability and reactivity

10.1 Reactivity:

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Stability:

Stable under recommended storage conditions.

10.3 Possibility of hazardous reaction:

No data available

10.4 Conditions to be avoided:

Very high temperatures.

10.5 Incompatible materials:

Strong oxidizing agents

10.6 Hazardous decomposition products:

Carbon oxides by heating in air/oxygen.

11. Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity:

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Oral: No data available
Aspiration: No data available
Skin: No data available

Skin corrosion/irritation:
No data available

Serious eye damage/eye irritation:
No data available

Respiratory or skin sensitization:
No data available

Germ cell mutagenicity:
No data available

Carcinogenicity:
No data available

Reproduction toxicity:
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Additional information

High dust concentrations may cause respiratory problems in case of prolonged inhalation.

12. Ecological Information

- 12.1 Toxicity**
No data available
- 12.2 Persistence and degradability**
No data available
- 12.3 Bioaccumulative potential**
No data available
- 12.4 Mobility in soil**
No data available

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12.5 Results of PBT and vPvB assessment

This product/mixture does not contain components in concentrations of 0.1% or above and classified as PBT or vPvB

12.6 Other adverse effects

No data available

12.7 Other information:

None

13. Disposal considerations

13.1 Waste treatment methods

Produkt

Residues have to be disposed of in accordance with the regulations for waste removal and in agreement with a designated disposal company.

Packaging

Dispose of as unused product

14. Transport information

The product is not subject to ADR/GGVS/RID/GGVE/ICAO/IATA/IDMG regulations.

14.1 UN-Number

ADR/RID: - IMDG: - IATA: -

14.2 Regular UN shipping name

ADR/RID/IMDG/IATA: - no dangerous goods

14.3 Transport hazard class

ADR/RID/IMDG/IATA: - no dangerous goods

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not relevant

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1 Chemical safety assessment according to directive EG 1907/2006 (REACH)

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A chemical safety assessment (CSA) according to REACH is not yet available for this product.

15.1.2 Classification and labelling according to EU directive 67/548/EWG und 1999/45/EG:
The substance is not subject to classification.

15.1.3 Hazard symbols, Hazard- and Precautionary statements
Not applicable

15.1.4 Special labelling of particular preparations / Hazard-determining components of labelling
Not applicable

15.1.5 Approval and/or restrictions on use
Not applicable

15.1.6 Other EU regulations
Not applicable

15.1.7 Other requirements, restrictions and prohibitions
Not applicable

16. Other information

Changes in this version compared to the previous one
Not applicable

Data sources

- Gefahrstoffinformationssystem der gewerbl. BG (GESTIS)
- CRC Handbook of Chemistry and Physics
- MSDS of other producers
- Ullmann: Technische Chemie

Further information

Issuer of safety data sheet and contact

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Important note

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