



ART
CARBON
Opravdu čistá voda

SAFETY DATA SHEET

ART CARBON

Adsorption material containing carbon nanotubes

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND BUSINESS/COMPANY

Commercial name: ART CARBON

Product type: Adsorpční materiál založený na uhlíkových nanotrubičkách

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2. HAZARD IDENTIFICATION

This product is not hazardous to health and the environment according to EC Regulation No. 1272/2008 and OSHA GHS 29 CFR 1910.1200.

Hazard classification: not classified

Label elements including precautionary statements:

Pictograms: invalid

Signal words: invalid

Hazard informations: invalid

Precautionary statements:

P 23-Keep the lid tightly closed.

P260-Do not inhale dust/fume/gas/mist/vapors/spray.

P273-Avoid release to the environment.

P280-Wear protective gloves/eye protection/face protection.

Other risks not classified:

Danger of explosion: When the product is dry, dust can form an explosive mixture with air.

3. COMPOSITION AND INGREDIENTS INFORMATION

Water (≈50%), carbon nanotubes immobilized on fibrous support (≈50%).

4. FIRST AID INSTRUCTIONS

- Skin contact:** Remove contaminated clothing immediately. Wash contaminated skin with soap and lukewarm water. If irritation occurs, contact a doctor.
- Eye contact:** Keep the eye open and rinse with plenty of water for at least 10 minutes. Seek medical advice if pain, blurred vision, swelling, burning or redness occurs/persists.
- Inhalation:** If vapors/dust are inhaled, move the affected person to fresh air, keep warm and allow him/her to rest. If breathing difficulties occur, oxygen mask can be used and medical advice has to be sought.
- Ingestion:** Do not induce vomiting. Rinse your mouth with water and then drink sip water to remove the taste from your mouth. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head deep forward to prevent inhalation. Get medical attention.

5. FIRE-FIGHTING INSTRUCTIONS

- Suitable extinguishing media:** water fog, foam, carbon dioxide, dry chemicals
- Unsuitable extinguishing media:** High volume water jet
- Specific risk:** -
- Protective equipment:** Wear self-contained breathing apparatus and suitable protective equipment.
- Combustion products:** May produce toxic fumes, carbon monoxide, carbon dioxide, metal oxides.

6. ACCIDENTAL RELEASE MEASURES

Human safety measures:

The cleaning crew must be equipped with appropriate protective equipment (see section 8). The material can create slippery surfaces. Avoid explosive dust/air mixture.

Environmental protection measures:

Collect for disposal. Avoid release to natural waters, sewers and biological wastewater treatment plants. Remove contaminated soil.

Accidental leak instructions:

Soak up with adsorbent such as clay, sand or other suitable materials. Treat contaminated areas with caution (slippery surfaces). If the material is dry, dispose of it by vacuuming with a Hepa filter or wipe with a damp cloth. Avoid dust formation. Use sealable packaging for this purpose.

7. HANDLING AND STORAGE

Handling:

Heating of material to high temperatures (> 80 ° C) may result in gases and dust. For such operating conditions it is necessary to ensure good ventilation of the working area. Avoid dust formation (if material is dry). Contact with skin, eye and respiratory dust (if material is dry) should be avoided at all times. Handle in accordance with good industrial hygiene and safety regulations. Wash your hands with soap before eating, drinking, smoking, applying cosmetics or using toiletries.

Storage:

Keep only in the original sealed containers at the designated places. Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures. Storage temperature is between 5-30 ° C. Avoid freezing.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

PERSONAL PROTECTION

Hand protection:

Protective gloves, suitable materials for safe gloves - EN 374-3: Nitrile rubber (NBR;> 0.35 mm). Unsuitable materials: do not use neoprene gloves, neoprene absorbs nanoparticles.

Skin and body protection:

Wear gloves and other clothing necessary to prevent skin contact.

Respiratory protection:

Wear suitable respiratory equipment with a high performance dust cassette with P3 filter when the product is warm or dry.

Eye protection:

Chemical goggles or safety goggles.

In case of contact, ensure immediate removal from eyes, skin and clothing. Wash hands and other affected areas with soap and water before eating, drinking, smoking or before leaving work. Institutions / companies working with this material should be equipped with a device for easy washing. Replace contaminated clothing immediately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state and color:	black pasty suspension
Odor:	odorless
Melting point/range:	0°C
Boiling point/range:	100°C
Saturated vapor pressure:	approx. 18 mm Hg při 20°C
Density:	1 g/cm ³ at 0°C
Solubility in water:	soluble, resp. dilutable
Viscosity:	not determined
pH:	7-11
Danger of explosion:	product is not explosive

Note: The physical properties listed above are typical values and should not be used as specifications.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions and handling
Materials to avoid:	Strong oxidizing and reducing agents.
Conditions to avoid:	Temperatures above 80 °C. Avoid dust formation when the product is dry.
Hazardous decomposition:	No hazardous decomposition products known at room temperature are known (see section 5). Thermal decomposition or combustion can produce smoke containing carbon oxides and low molecular weight organic compounds.

11. TOXICOLOGY INFORMATION

No data available for this product.

Toxicology data for individual components:

Short MWCNT obtained by catalytic gas-phase deposition-synthetic carbon of tubular nature)

Acute toxicity, oral:	LD50, mouse > 2000 mg/kg
Acute toxicity, dermal:	LD50, mouse > 2000 mg/kg
Genotoxicity:	Non-mutagenic (Ames test)
Skin irritation/corrosion:	No irritation and corrosivity.
Sub-chronic toxicity:	Inhalation, repeated dose, 5 days, mouse, LOAEC: 2 mg/m ³ Target organ: lung (pneumonia) Inhalation, repeated dose, 90 days, mouse, LOAEC: 0.1 mg/m ³ Target organ: lung (multifocal granulomatous inflammation) Oral administration, repeated dose, 28 days, mouse, NOAEL: 0.5 mg/kg
Carcinogenicity:	No carcinogenic response (Two-year bioassay in rat's peritoneal cavity).
Possible Hazards:	May be harmful if inhaled.

12. ECOLOGY INFORMATION

No data available for this product.

Toxicological data for individual components

Short MWCNT (obtained by catalytic gas-phase deposition-synthetic carbon of tubular nature).

Biodegradability:	Biodegradability is not expected.
Short term toxicity:	Fish, Danio rerio, 14 days, EC50>100 mg/ml Invertebrates, Daphnia magna, fresh water, 48h, EC50> 100 mg/l Algae, Desmodesmus subspicatus, fresh water, 72h, EC50: 134 mg/l
Long term toxicity:	Ryba, Danio rerio, semi statické, EC10: 100 mg/l

Bezobratlí, Daphnia magna, semistatické, NOEC>25 mg/l

Environmental protection: Do not allow to enter soil, sewerage, drains

13. DISPOSAL INSTRUCTIONS

Product:

Dispose of in accordance with valid international, national, and local laws and regulations.

Packaging material:

Empty packaging may be landfilled as long as it complies with the environmental regulations and local and national regulations.

14. TRANSPORT INFORMATION

Podle národních a mezinárodních pravidel, které upravují silniční, železniční, leteckou a námořní dopravu není tento produkt považován za nebezpečný.

15. REGULATIONS INFORMATION

REACH Status: The substances in this product have been re-registered/registered according to EEC REACH 1907/2006.

The REACH registration number for the short MWCNT is 01-2119879048-26-0001.

This product contains one or more substances subject to TSCA Section 5 (e) which imposes certain restrictions on handling, storage, distribution, use and disposal.

GHS Labeling (CLP / OSHA)

Symbols :	-
H-phrases:	-
P-phrases:	P 233: Keep container tightly closed. P260: Do not breathe dust/fume/gas/mist/vapors/spray. P273: Avoid release to the environment. P280: Wear protective gloves / protective clothing / eye protection / face protection.

16. ADDITIONAL INFORMATION

The content and format of this safety data sheet are in accordance with REACH 1907/2006 Article 32., Regulation (EC) No 1272/2008 (CLP / GHS) and OSHA GHS Regulation 29 CFR 1910.1200 and its amendment regulations.

Disclaimer:

Company ART CARBON s.r.o. does not guarantee clarity or accuracy of the information provided in this document. This document is intended only as a guide for appropriate safety precautions for a properly trained person using this product. Individuals who read this information must be aware of the activity they practise and assess its suitability for a particular purpose. As the conditions or methods of use are beyond our control, we take no liability and expressly refuse any responsibility for any use of this product.