

Safety Data Sheet

Carbon Nanofibers

Bergen Carbon Solutions AS

Version: 2.0/EN

Revision Date: 30 Nov 2021

Section 1: Identification

1.1 Product identifiers

Product name	eco-Carbon nanofibers
Brand	Bergen Carbon Solutions AS
CAS-No.	308068-56-6
RC-No.	927-670-5
REACH No.	Not applicable
HS Code	280300

1.2 Relevant identified uses of the substance or mixture

Identified uses	Laboratory and industrial chemicals, Manufacturing of substances.
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1.3 Detail of supplier of the data sheet

Company	Bergen Carbon Solutions AS Fleslandvegen 70E, 5258 Blomsterdalen, Norway
Telephone	+47 561 23 777 / +47 461 77 783
Emergency phone	Emergency number – 112 Fire and bigger accidents – 110 Ambulance and medical phone – 113

Section 2: Hazard(s) Identification

2.1 Classification

Classification according to Regulation (EC) NO1275 / 2008	Eye irritation (category 2), H319 Specific target organ toxicity – single exposure (category 3), Respiratory irritation, H335.
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2.2 Label elements

As per regulations	EC No. 1272 / 2008
Pictograms	

2.3 Hazard statement(s)

H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

2.4 Precautionary statements(s)

P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P264	Wash skin thoroughly after handling.
P271	Use only in well-ventilated area.

P280	Wear eye protection / face protection.
P304 + P340 + P312	If Inhaled: Remove person to fresh air and keep comfortable for breathing. Call a Poison Center / physician if you feel unwell.
P305 + P351 + P338	If In Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present. Continue rinsing.
Supplement hazard statement	None.

Section 3: Composition/Information on Ingredients

3.1 Substances

Chemical name	eco-Carbon nanofibers
Synonyms	ECO-C1, C2, C3
Linear formula	C

	ECO-C1	ECO-C2	ECO-C3
C	≥95	≥90	≥80
CNF	≥ 80	≥ 70	≥ 60
Metal Content	≤2	≤ 5	≤ 10

*Numbers represent percentage. Detailed information of product is available in product data sheet on webpage.

Section 4: First-Aid Measures

4.1 Description of first-aid measures

General advice	Consult a physician. Show this safety data sheet to the physician in attendance. Move out of dangerous area.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash off and rinse skin with plenty of water/shower, use mild soap, consult with physician. Take immediately off all contaminated clothing.
In case of eye contact	Flush and rinse eyes with plenty of water for at least 15 minutes and consult physician. Remove contact lenses.
If swallowed	Do not induce vomiting. Immediately drink water (two glasses). Do not give anything by mouth to an unconscious person. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling.

Section 5: Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media	Water Foam, Carbon Dioxide (CO ₂), Dry Powder.
Unsuitable extinguishing media	For this substance, there are no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance

Nature of decomposition products not known.
Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

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

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Advice for non-emergency personnel

Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let the product enter drains or ducts.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see section 7 & 10). Avoid generation of dusts. Clean up affected area. Dispose properly. Handle product from a dry state.

6.4 Reference to other section

Disposal

See section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling

Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance (use nitrile gloves). For precautions see section 2.

7.2 Conditions for safe storage, including any inculpabilities

Storage conditions

Tightly closed. Cool and dry place.

7.3 Specific end use(s)

Apart from the use mentioned in section 1.2, no other specific users are stipulated.

Section 8: Exposure Controls / Personal Protection

8.1 Control parameters

Ingredients with workplace control parameters.

8.2 Exposure controls

Eye / face protection

Personal protective equipment.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Safety glasses.

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviation from those stated in EN374 please contact the supplier of CE-approved gloves.

Body protection

Protective clothing.

Respiratory protection

Required when dust is generated or the powdered product. Our recommendations on filtering respiratory protection are based on the following standards, such as NIOSH (US) or CEN U(EU) and other accompanying standards relating to the used respiratory protection system. Recommended filter type: filter type P2.

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: black powder; nano particles.
b) Odour	No data available.
c) Odour Threshold	No data available.
d) pH	No data available.
e) Melting point / freezing point	Melting point / range: 3652 – 3697 °C
f) Initial boiling point and boiling range	No data available.
g) Flash point	No data available.
h) Evaporation rate	No data available.
i) Flammability (solid, gas)	No data available.
j) Upper / lower flammability or explosive limits	No data available.
k) Vapour pressure	No data available.
l) Vapour density	No data available.
m) Relative density	No data available.

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| n) Water solubility | No data available. |
| o) Partition coefficient: n-octanol / water | No data available. |
| p) Autoignition temperature | No data available. |
| q) Decomposition temperature | No data available. |
| r) Viscosity | Viscosity, kinematic: No data available.
Viscosity, dynamic: No data available. |
| s) Explosive properties | No data available. |
| t) Oxidizing properties | No data available. |

9.2 Other safety information

Particle size

See technical data sheet for ECO C1-C3.

Section 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 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions of hazardous reactions

No information available.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

In the event of fire: see section 5.

Section 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity	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	IARC,NTP,OSHA: No ingredient of this product present at levels greater than or equal to 0.1 % is identified as probable, possible or confirmed human carcinogen.
Reproductive toxicity	No data available.

Specific target organ toxicity – single exposure

Inhalation – May cause respiratory irritation.

Specific target organ toxicity – repeated exposure

No data available.

Aspiration hazard

No data available.

11.2 Additional information

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated in BCS.

Section 12: Ecological Information (non-mandatory)

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bio accumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This substance / mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1 % or higher.

12.6 Other adverse effects

No data available.

Section 13: Disposal Considerations (non-mandatory)

13.1 Waste treatment methods

Product

See <https://www.avfallsdeklarering.no/> or processes regarding the return of chemicals and containers, or contact us there if you have further questions.

Section 14: Transport Information (non-mandatory)

14.1 UN number

ADR / RID: - | IMDG: - | IATA: -

14.2 UN proper shipping name

ADR / ROD

Not dangerous goods.

IMDG

Not dangerous goods.

IATA

Not dangerous goods.

14.3 Transport hazard class(es)

ADR / RID: - | IMDG: - | IATA: -

14.4 Packing group

ADR / RID: - | IMDG: - | IATA: -

14.5 Environmental hazards

ADR / RID

No

IMDG Marine pollutant

No

IATA

No

14.6 Special precautions for user

Further information

Section 15: Regulatory Information (non-mandatory)

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

Reach – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907 / 2006.
 Not applicable.

National legislation

Not applicable.

Seveso III: Directive 2012 / 18 / EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances

Other regulations

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

Section 16: Other Information

Full text on H-Statements referred to under section 2 and 3.

Further information

H319 – Causes serious eye irritation.

H335 – May cause respiratory irritation.

The above information is believed to be correct but does no purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the

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product. Bergen Carbon Solutions and its Affiliates shall not be held liable for any damage resulting handling or from contact with the above product. Errors and omissions excepted.

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