

SAFETY DATA SHEET

Metallurgical Carbon 80



SDI Biocarbon Solutions™

Date of issue: 20 March 2026
Date of First Issue: 13 December 2025
Version 3.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name Metallurgical carbon 80
Nanoform The product does not contain nanoparticles.

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

Identified Use(s) Reductant in metals smelting process, Steam boiler fuel
Uses advised against Anything other than the above.

1.3 Details of the supplier of the safety data sheet

Company Identification SDI Biocarbon Solutions
661 Manufacturers Drive
Columbus, MS 39702

Telephone +1 662-272-1017
Fax
E-mail (competent person) Colton.Hulsey@sdibiocarbon.com

1.4 Emergency telephone number

Emergency Phone No. CHEMTREC
1 (800) 424-9300
Language(s) spoken: English

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP)

Not classified

2.2 Label elements

Product name According to Regulation (EC) No. 1272/2008 (CLP)
Metallurgical carbon 80
Contains: Not applicable.

Hazard Pictogram(s) None assigned

Signal Word(s) None assigned

Hazard Statement(s) None assigned

Precautionary Statement(s) None assigned

Supplemental information Not applicable.

2.3 Other hazards

None Known.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

Not hazardous according to current CLP Regulations. No component of this mixture is included above the relevant concentration levels detailed within section 3.2.1 of SDS regulation 2020/878.

SAFETY DATA SHEET

Metallurgical Carbon 80



SDI Biocarbon Solutions™

Date of issue: 20 March 2026
Date of First Issue: 13 December 2025
Version 3.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Avoid breathing vapours. Avoid contact with skin and eyes. Contaminated clothing should be laundered before reuse.

Inhalation

IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If irritation develops and persists, get medical attention.

Skin contact

IF ON SKIN: Wash with plenty of water. Remove clothing and wash thoroughly before use. Wash affected skin with soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation develops and persists, get medical attention.

Ingestion

Rinse mouth. Give plenty of water to drink. Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

None Known.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

As appropriate for surrounding fire.

Unsuitable extinguishing media

Direct water jet may spread the fire.

5.2 Special hazards arising from the substance or mixture

Product is not classified as flammable, but will burn on contact with flame or exposure to high temperature. Combustion may cause toxic fumes. (Carbon monoxide, Carbon dioxide).

5.3 Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

No action should be taken involving personal risk. Avoid contact with skin and eyes. Ensure adequate ventilation. Avoid generation of dust. Avoid breathing dust.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Provided it is safe to do so, isolate the source of the leak. Sweep spilled substances into containers if appropriate moisten first to prevent dusting. Transfer to a container for disposal. Ventilate the area and wash spill site after material pick-up is complete.

6.4 Reference to other sections

See Section: 8,13

7. SECTION 7: HANDLING AND STORAGE

SAFETY DATA SHEET

Metallurgical Carbon 80



SDI Biocarbon Solutions™

Date of issue: 20 March 2026
Date of First Issue: 13 December 2025
Version 3.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

7.1	Precautions for safe handling	Ensure adequate ventilation. Keep good industrial hygiene. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.
7.2	Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources.
	storage temperature	Keep cool. Protect from sunlight.
	Incompatible materials	Stable under normal conditions
7.3	Specific end use(s)	See Section: 1.2

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	Control parameters	
8.1.1	Occupational exposure limits	This mixture does not contain any substances which either present a health or environmental hazard according to Regulation (EC) No. 1272/2008 or have an occupational exposure limit assigned.
8.1.2	Biological limit value	None assigned.
8.1.3	PNECs and DNELs	None assigned.
8.2	Exposure controls	
8.2.1	Appropriate engineering controls	Ensure adequate ventilation. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources.
8.2.2	Individual protection measures, such as personal protective equipment	Keep good industrial hygiene. Wear appropriate personal protective equipment, avoid direct contact. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke at the work place.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection



Wear eye protection with side protection (EN166). Eyewash bottles should be available.

Skin protection



Wear suitable chemical resistant protective gloves for frequent or prolonged operations tested to EN374 with an acceptable permeation test. Contaminated gloves should be carefully rinsed with water before reuse.

Respiratory protection



Respiratory protection is not necessary if room is well ventilated. In case of inadequate ventilation wear respiratory protection.

Thermal hazards

Not applicable

8.2.3	Environmental exposure controls	Avoid release to the environment.
-------	--	-----------------------------------

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties
-----	--

SAFETY DATA SHEET

Metallurgical Carbon 80



SDI Biocarbon Solutions™

Date of issue: 20 March 2026
Date of First Issue: 13 December 2025
Version 3.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Physical state	Solid
Colour	Black
Odour	Odourless
Melting point/freezing point	>3000 F
Boiling point or initial boiling point and boiling range	Not applicable.
Flammability	Not flammable.
Lower and upper explosion limit	Not determined.
Flash point	Not determined.
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined.
pH	9.0
Kinematic viscosity	Not applicable - Solid
Solubility	Insoluble
Partition coefficient: n-octanol/water (log value)	Not applicable.
Vapour pressure	Not applicable.
Density and/or relative density	Not applicable.
Relative vapour density	Not applicable.
Particle characteristics	Not applicable.

9.2 Other information

Explosive properties	Not explosive
Oxidising properties	Not oxidising.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions
10.2 Chemical stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	None anticipated. Product is not classified as flammable, but will burn on contact with flame or exposure to high temperature.
10.4 Conditions to avoid	Heat and direct sunlight
10.5 Incompatible materials	None Known.
10.6 Hazardous decomposition products	Combustion may cause toxic fumes. (Carbon monoxide, Carbon dioxide).

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
Acute toxicity - Ingestion	Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: LD50 >2000 mg/kg bw
Acute toxicity - Inhalation	Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: LC50 >5 mg/l (Dust/mist.)
Acute toxicity - Skin contact	Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: LD50 >2000 mg/kg bw
Skin corrosion/irritation	Mixture: Based upon the available data, the classification criteria are not met.
Serious eye damage/irritation	Mixture: Based upon the available data, the classification criteria are not met.
Respiratory or skin sensitisation	Mixture: Based upon the available data, the classification criteria are not met.
Germ cell mutagenicity	Mixture: Based upon the available data, the classification criteria are not met.
Carcinogenicity	Mixture: Based upon the available data, the classification criteria are not met.
Reproductive toxicity	Mixture: Based upon the available data, the classification criteria are not met.
STOT - single exposure	Mixture: Based upon the available data, the classification criteria are not met.
STOT - repeated exposure	Mixture: Based upon the available data, the classification criteria are not met.
Aspiration hazard	Mixture: Based upon the available data, the classification criteria are not met.
11.2 Information on other hazards	
11.2.1 Endocrine disrupting properties	None Known.
11.2.2 Other information	None Known.

SAFETY DATA SHEET

Metallurgical Carbon 80



SDI Biocarbon Solutions™

Date of issue: 20 March 2026
Date of First Issue: 13 December 2025
Version 3.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Mixture: Based upon the available data, the classification criteria are not met.
12.2	Persistence and degradability	Estimated LC50 (Mixture): >100 mg/l. No data for the mixture as a whole.
12.3	Bioaccumulative potential	No data for the mixture as a whole.
12.4	Mobility in soil	No data for the mixture as a whole.
12.5	Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6	Endocrine disrupting properties	None Known.
12.7	Other adverse effects	None Known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Disposal should be in accordance with local, state or national legislation.
------	-------------------------	---

14. SECTION 14: TRANSPORT INFORMATION

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

	ADR/RID	IMDG	IATA/ICAO
14.1	UN number or ID number	None assigned	None assigned
14.2	UN proper shipping name	None assigned	None assigned
14.3	Transport hazard class(es)	None assigned	None assigned
14.4	Packing group	None assigned	None assigned
14.5	Environmental hazards	Not classified	Not classified
14.6	Special precautions for user	See Section: 2	
14.7	Maritime transport in bulk according to IMO instruments	No information available.	No information available.
14.8	Additional information	Not applicable	Not applicable

15. SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1	EU regulations	
	Authorisations and/or restrictions on use	None.
15.1.2	National regulations	
	Germany (WGK)	non-hazardous to water (nwg)
15.2	Chemical Safety Assessment	A chemical safety assessment is not required under REACH.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Not applicable– V1.0

References:

Existing Safety Data Sheet (SDS)
Existing ECHA registration(s) for components

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Legend

SAFETY DATA SHEET



SDI Biocarbon Solutions™

Metallurgical Carbon 80

Date of issue: 20 March 2026
Date of First Issue: 13 December 2025
Version 3.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

ADR	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL	Derived no effect level
ECHA	European Chemicals Agency
EU	European Union
IATA	IATA: International Air Transport Association
ICAO	ICAO: International Civil Aviation Organization
IMDG	IMDG: International Maritime Dangerous Goods
LC50	Lethal concentration at which 50% of the population is killed
LD50	Lethal dose at which 50% of the population is killed
LTEL	Long term exposure limit
PBT	PBT: Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	RID: Regulations concerning the international railway transport of dangerous goods
STEL	Short term exposure limit
TWA	Time Weighted Average
vPvB	vPvB: very Persistent and very Bioaccumulative
WGK	Wassergefährdungsklasse (Germany) / Water hazard class

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. National Carbon Technologies, LLC gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. National Carbon Technologies, LLC accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

Annex to the extended Safety Data Sheet (eSDS)

Not applicable

SAFETY DATA SHEET

Metallurgical Carbon 80



SDI Biocarbon Solutions™

Date of issue: 20 March 2026
Date of First Issue: 13 December 2025
Version 3.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878
