

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** carbon
- **Chemical Identification:** graphite
- **Article number:** 0381
- **CAS Number:**
7440-44-0
- **EC number:**
231-153-3
- **Registration number**
A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Chemical for research, development, manufacturing, laboratory chemical for analysis.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Biosolve Chimie
20 Rue Roger Husson, 57260 Dieuze, France
Tel: +33 3 878 675 80/81/82/83/84/85
Email: info@biosolvechimie.com
-
- Biosolve B.V.
Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.
Tel: +31-(0)40-2071300
Fax: +31-(0)40-2048537
Email: info@biosolve-chemicals.com
- **Further information obtainable from:** Product safety department.
- **1.4 Emergency telephone number:**
Contact list of appointed bodies for information relating to emergency health response, according to Art. 45(1) Reg. (EC) No 1272/2008.
See below section 16 or at <https://poisoncentres.echa.europa.eu/home>.
Help desk: <http://echa.europa.eu/web/guest/support/helpdesks/national-helpdesks/list-of-national-helpdesks>.
Data from: ECHA - EUROPEAN CHEMICALS AGENCY
For more information see section 16.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Sol. 1 H228 Flammable solid.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: carbon

(Contd. of page 1)

Self-heat. 2 H252 Self-heating in large quantities; may catch fire.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02

Signal word Danger

Hazard statements

H228 Flammable solid.

H252 Self-heating in large quantities; may catch fire.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P235 Keep cool.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P413 Store bulk masses greater than 1 kg at temperatures not exceeding 25°C.

P420 Store separately.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS No. Description

CAS: 7440-44-0 carbon

Identification number(s)

EC number: 231-153-3

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: carbon

(Contd. of page 2)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: carbon

(Contd. of page 3)

· **Hand protection**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection** Not required.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Solid

· **Colour:**

Black

· **Odour:**

Characteristic

· **Odour threshold:**

No data available.

· **Melting point/freezing point:**

~3,550 °C

· **Boiling point or initial boiling point and boiling range**

4,827 °C

· **Flammability**

Product is not flammable.

· **Lower and upper explosion limit**

· **Lower:**

No data available

· **Upper:**

No data available

· **Flash point:**

Not applicable.

· **Decomposition temperature:**

No data available

· **pH**

6-9

· **Viscosity:**

· **Dynamic:**

Not applicable.

· **Solubility**

· **water:**

Not determined.

· **Partition coefficient n-octanol/water (log value)**

No data available

· **Vapour pressure:**

Not applicable.

· **Density and/or relative density**

· **Density at 20 °C:**

1 g/cm³

· **Relative density**

No data available

· **Bulk density:**

150 kg/m³

· **Vapour density**

Not applicable.

· **Particle characteristics**

See section 3.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: carbon

(Contd. of page 4)

- **9.2 Other information**
- **Appearance:**
- **Form:** Solid
- **Important information on protection of health and environment, and on safety.**
- **Ignition temperature:** No data available
- **Explosive properties:** Not determined.
- **Change in condition**
- **Evaporation rate** Not applicable.
- **Information with regard to physical hazard classes**
- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Flammable solid.
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Self-heating in large quantities; may catch fire.
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: carbon

(Contd. of page 5)

- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:** Not hazardous for water.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

HP3	Flammable
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---------------------------------------|--------------------------|
| · 14.1 UN number or ID number | |
| · ADR, IMDG, IATA | UN1362 |
| · 14.2 UN proper shipping name | |
| · ADR | UN1362 CARBON, ACTIVATED |

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31



Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: carbon

(Contd. of page 6)

· IMDG, IATA	CARBON, ACTIVATED
· 14.3 Transport hazard class(es)	
· ADR	
	
· Class	4.2 (S2) Substances liable to spontaneous combustion.
· Label	4.2
· IMDG, IATA	
	
· Class	4.2 Substances liable to spontaneous combustion.
· Label	4.2
· 14.4 Packing group	
· ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Substances liable to spontaneous combustion.
· Hazard identification number (Kemler code):	40
· EMS Number:	F-A,S-J
· Stowage Category	A
· Stowage Code	SW1 Protected from sources of heat.
· Handling Code	H2 Keep as cool as reasonably practicable
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	0
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· Transport category	4
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	0

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: carbon

(Contd. of page 7)

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** Substance is not listed.

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 40

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

Substance is not listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

Substance is not listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.

· **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

Substance is not listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product safety department

· **Contact:**

Austria German Vergiftungsinformationszentrale 01 406 43 43 <http://www.goeg.at/de/VIZ>

Belgium French Centre antipoison 070 245 245 <http://www.centreantipoisons.be>

Dutch Antigif centrum 070 245 245 <http://www.antigifcentrum.be>

German Giftinformationszentrum 070 245 245 <http://www.poissoncentre.be>

Bulgaria* Bulgarian Токсикологични центрове 02 9154 411 <https://pirogov.eu/bg>

Croatia* Croatian Centar za kontrolu otrovanja +385 1 2348 342 <https://www.imi.hr/en/jedinica/poison-control-centre>

Czech Rep Czech Toxikologické informační středisko +420 224 91 92 93; +420 224 91 54 02 <http://www.tis-cz.cz>

Denmark Danish Giftlinien +45 8212 1212 <https://www.bispebjerghospital.dk/giftlinien>

Estonia Estonian Mürgistusteabekeskus 16662; +372 7943 794 <https://www.16662.ee>

Finland Finnish Myrkytystietokeskus 0800 147 111; +358 9 471 977 <http://www.hus.fi/sairaanhoito/sairaanhoitopalvelut/myrkytystietokeskus/Sivut/default.aspx>

France French Angers +33 2 41 48 21 21 <http://www.centres-antipoison.net/angers/index.html>

Bordeaux +33 5 56 96 40 80 <http://www.centres-antipoison.net/bordeaux/index.html>

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: carbon

(Contd. of page 8)

Lille +33 0800 59 59 59 <http://www.centres-antipoison.net/lille/index.html>
 Lyon +33 4 72 11 69 11 <http://www.centres-antipoison.net/lyon/index.html>
 Marseille +33 4 91 75 25 25 <http://www.centres-antipoison.net/marseille/index.html>
 Nancy +33 3 83 22 50 50 <http://www.centres-antipoison.net/nancy/index.html>
 Paris +33 1 40 05 48 48 <http://www.centres-antipoison.net/paris/index.html>
 Strasbourg +33 3 88 37 37 37 <http://www.centres-antipoison.net/strasbourg/index.html>
 Toulouse +33 5 61 77 74 47 <http://www.centres-antipoison.net/toulouse/index.html>
 Germany German Berlin +49 30 19240 <https://giftnotruf.charite.de>
 Bonn +49 228 19240 <http://www.gizbonn.de/index.php?id=272>
 Erfurt +49 361 730730 <https://www.ggiz-erfurt.de/home.html>
 Freiburg +49 761 19240 <https://www.uniklinik-freiburg.de/giftberatung.html>
 Göttingen +49 551 19240 <https://www.giz-nord.de/cms/index.php>
 Homburg/Saar +49 6841 19240 [http://www.uniklinikumsaarland.de/de/einrichtungen/
 k l i n i k e n _ i n s t i t u t e / k i n d e r _ u n d _ j u g e n d m e d i z i n /
 informations_und_behandlungszentrum_fuer_vergiftungen_des_saarlandes](http://www.uniklinikumsaarland.de/de/einrichtungen/kliniken_institute/kinder_und_jugendmedizin/informations_und_behandlungszentrum_fuer_vergiftungen_des_saarlandes)
 Mainz +49 6131 19240 <http://www.giftinfo.uni-mainz.de/index.php?id=24807>
 München +49 89 19240 <http://www.toxinfo.med.tum.de>
 Greece Greek κέντρο δηλητηριάσεων +30 213 200 9000 <http://www.aglaiakyriakou.gr/>; <http://0317.syzefxis.gov.gr>
 Hungary Hungarian Egészségügyi Toxikológiai Tájékoztató Szolgálat +36 6 80 20 11 99; +36 06 1 476 6464 <http://www.okbi.hu/page.php?trid=1&dz=103>
 Italy Italian Bergamo +39 800 88 33 00 [http://www.asst-pg23.it/section/259/Tossicologia_ -
 _Centro_antiveleni](http://www.asst-pg23.it/section/259/Tossicologia_-_Centro_antiveleni)
 Firenze +39 55 794 78 19 <http://www.antiveleni.altervista.org>
 Milano +39 2 661 01 029 <http://www.centroantiveleni.org>
 Pavia +39 382 244 44 <http://www-3.unipv.it/reumatologia-tossicologia/cav>
 Napoli +39 81 747 28 70
 Foggia +39 881 732 326
 Roma +39 6 685 93 726 / +39 6 499 78 000 / +39 6 305 43 43 [http://www.corso-primo-soccorso-
 roma.it/centri%20antiveleno-lazio.html](http://www.corso-primo-soccorso-roma.it/centri%20antiveleno-lazio.html)
 Ireland English Poisons information Centre of Ireland +353 1 809 21 66 <http://www.poisons.ie/Public>
 Latvia* Latvian Saindēšanās informācijas centri +371 670 00 610 <https://www.aslimnica.lv/lv>
 Russian Латвия +371 67000610 <https://www.aslimnica.lv/lv>
 Lithuania Lithuanian Apsinuodijimų informacijos biuras + 370 5 236 20 52 <http://www.apsinuodijau.lt>
 Luxembourg German Giftinformationszentrum +49 800 255 00 <http://www.poisoncentre.be>
 French Centre antipoison +352 800 255 00 <http://www.centreantipoisons.be>

· **Date of previous version:** 19.10.2022

· **Version number of previous version:** 4

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: carbon

vPvB: very Persistent and very Bioaccumulative
Flam. Sol. 1: Flammable solids – Category 1
Self-heat. 2: Self-heating substances and mixtures – Category 2
**** Data compared to the previous version altered.***

(Contd. of page 9)