

according to WHMIS

SIGRAFIL® C T130 (SIGRAFIL C PUT)

Print date: 30.07.2018

Product code: OB_INV1031006

Revision date: 12.07.2018

1. Identification**Product identifier**

SIGRAFIL® C T130 (SIGRAFIL C PUT)

Further trade names

Sigrafil C6-4.0/240 T130

Continuous or Chopped Carbon Fiber

Product group: fibers

Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Raw material for production of Carbon fiber-reinforced plastics.

Details of the supplier of the safety data sheet

Company name:	SGL Carbon Fibers Ltd.	
	Location: Muir Of Ord, Ind. Est.	
Street:	Great North Road	
Place:	GB-IV6 7UA Muir Of Ord	
Telephone:	+44 (0)1463-27-4105	Telefax: +44 (0)1463-27-1470
e-mail:	sds@uk.sglcarbon.de	
Contact person:	Richard Miller	Telephone: +44 (0)1463-27-4152
Internet:	http://www.sglcarbon.com	

Emergency telephone number: +49 (89) 19240 (Poison control center - TU Muenchen)**2. Hazard identification****Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [CLP]: not relevant

Label elements**Other hazards**

Carbon fibers themselves are not classified as hazardous.

However, in processing carbon fiber-reinforced materials (e.g. sawing, grinding, milling) fibrous particles can be released, which fulfill the WHO criteria for respirability, i.e. these fragments can penetrate the alveoli. Such fibers are classified under Technical Regulation for Hazardous Substances (TRGS) 905 as a category 3 carcinogenic substance (suspected carcinogenic substances). For this reason, suitable measures to minimize exposure must be implemented (enclosure and extraction). Assessment of the possible exposure at the workplace must be carried out by the user.

3. Composition/information on ingredients**Mixtures****Chemical characterization**

Article based on Carbon fibers

Hazardous components

CAS No	Chemical name	Quantity
7440-44-0	non-graphitic Carbon Fibre (Carbon)	> 96.6%
	Impurities	>3.4%

4. First-aid measures**Description of first aid measures**

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General information

none

After inhalation

Provide fresh air. Dust may cause irritation.

After contact with skin

Gently wash with plenty of soap and water.

Fibers may cause skin irritation. Take off immediately all contaminated clothing.

In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eyes

May cause irritation to eyes. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. In all cases of doubt, or when symptoms persist, seek medical advice.

After ingestion

May cause irritation to mucous membranes Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

Indication of immediate medical attention and special treatment needed

none

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**Foam. Carbon dioxide (CO₂). Extinguishing powder water spray**Unsuitable extinguishing media**

High power water jet.

Specific hazards arising from the hazardous product

In case of fire may be liberated: Carbon dioxide (CO₂). Sulphur dioxide (SO₂) Carbon monoxide Hydrogogen Cyanide (HCN)

A (Fires of solids, mainly organic nature, which normally burn down under glow forming.).

Special protective equipment and precautions for fire-fighters

Do not inhale explosion and combustion gases. In case of insufficient ventilation, wear suitable respiratory equipment. [EN 12021]

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Avoid dust formation.

Wear personal protection equipment (refer to section 8). Avoid dust formation. Further remarks: Section 8

Wear personal protection equipment (refer to section 8). [DIN EN 469, EN 12021]

Environmental precautions

none

Methods and material for containment and cleaning up

Take up mechanically.

Reference to other sections

Additional information Section 8 and 13

7. Handling and storage**Precautions for safe handling**

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Advice on safe handling

Avoid contact with eyes and skin. Ensure adequate ventilation of the storage area.

Advice on protection against fire and explosion

Dust should be exhausted directly at the point of origin.

Further remarks: Section 9 (Other information)

Further information on handling

Section 8.2 "General protection and hygiene measures:"

Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep in a dry place. Keep container tightly closed in a cool, well-ventilated place.

Store in correctly labelled containers.

Advice on storage compatibility

none

Further information on storage conditions

none

8. Exposure controls/Personal protection**Control parameters****Additional advice on limit values**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Worker, industry. and Worker, professional. :

DNEL/DMEL (inhalation.) : 10 mg/m³

Exposure controls**Appropriate engineering controls**

Dust: 10 mg/m³ (inhalable); 1.25 mg/m³ (alveolar) [TRGS 900]

Procedures to check the limit monitoring: [DIN EN 481].

Protective and hygiene measures

Ensure adequate ventilation of the working area.

Eye/face protection

Avoid contact with eyes. Dust protection goggles.

Hand protection

PVC, NR (natural rubber, natural latex) NBR (Nitrile rubber) Butyl caoutchouc (butyl rubber)

Skin protection

Recommendation Protective suit.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. [EN 14387]

Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state:	solid
Colour:	black
Odour:	none

Test method

according to WHMIS

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pH-Value: not applicable

Changes in the physical state

Melting point: not applicable

Initial boiling point and boiling range: not applicable

Sublimation point: not applicable

Softening point: not applicable

Flash point: not applicable

Flammability

Solid: not applicable

Explosive properties

not explosive.

Lower explosive limits: not applicable

Upper explosive limits: not applicable

Ignition temperature: none

Auto-ignition temperature

Solid: none

Oxidizing properties

none

Vapour pressure: not applicable

Density (at 20 °C): ~ 1.8 g/cm³Water solubility:
(at 20 °C) 0.0047 g/L OECD 105 / EU A.6

Partition coefficient: not applicable

Viscosity / dynamic: not applicable

Other information

Carbon fibers are electrically conductive. Fibres may separate.

10. Stability and reactivity**Conditions to avoid**

none

Incompatible materials

none

Hazardous decomposition products

none

Further information

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

11. Toxicological information**Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No toxic data available.

Acute toxicity

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Based on available data the classification criteria are not met.

Acute toxicity (oral): LD50: > 2000 mg/kg bw/day [Rat] (OECD 423)

Acute toxicity (dermal): No data available

Acute toxicity (inhalative): No data available

Subacute oral toxicity (Rat) OECD 422 :

859 mg/kg bw/day (male)

1051 mg/kg bw/day (female pre-mating)

994 mg/kg bw/day (female gestation)

1521 mg/kg bw/day (female lactation)

CAS No	Chemical name			
	Route of exposure	Method	Dose	Species
7440-44-0	non-graphitic Carbon Fibre (Carbon)			
	oral	LD50	> 2000 mg/kg	rat
				OECD 423 / EU B.1

Irritation and corrosivity

Skin corrosion/irritation: Not an irritant. [Rat] (OECD 404)

Irritant effect on the eye: Not an irritant. [Rabbit] (OECD 405)

Sensitizing effects

Respiratory or skin sensitisation:

Severe effects after repeated or prolonged exposure

STOT-RE

Based on available data the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data the classification criteria are not met.

Aspiration hazard

No data available

Specific effects in experiment on an animal

STOT-RE

Based on available data the classification criteria are not met.

12. Ecological information**Ecotoxicity**

Acute (short-term) fish toxicity: LC50: > 100 mg/l Exposure time: (96 h) Method: OECD 203

Acute Daphnia toxicity: EC50 > 100 mg/l Exposure time: (48 h) Method: OECD 202

Algae toxicity: EC50 > 100 mg/l Exposure time: (72 h) Method: OECD 201

Bacterial toxicity: > 1000 mg/l Exposure time: (3 h) Method: OECD 209

Persistence and degradability

not relevant

Bioaccumulative potential

not relevant

Mobility in soil

No information available.

Other adverse effects

No adverse effects known.

13. Disposal considerations**Waste treatment methods**

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Advice on disposal

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Contaminated packaging

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

14. Transport information**Marine transport (IMDG)****United Nations proper shipping name:**

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)**United Nations proper shipping name:**

No dangerous good in sense of these transport regulations.

15. Regulatory information**Canadian regulations**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Additional information

registration status:

All components of this product are included on the inventories of, or are not required to be listed on the inventories of:

EU --> EINECS/ELINCS

USA --> TSCA

CAN --> DSL

JPN --> ENCS (Class 1 & 2)

CHN --> IECS

KOR --> KECI

AUS --> AICS

NZL --> NZIoC / HSNO

16. Other information**Changes**

This data sheet contains changes from the previous version in section(s): 3.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)