

according to Regulation (EC) No 1907/2006

**SIGRATHERM® - soft felt all types (KFA, KFD, GFA, GFD)**

Print date: 29.05.2013

Product code: OB\_MEI2031001

Revision date: 29.05.2013

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

SIGRATHERM® - soft felt all types (KFA, KFD, GFA, GFD)

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

"Insulationmaterial; Filtermaterial; base for catalyser."

**1.3. Details of the supplier of the safety data sheet**

Company name:	SGL CARBON GmbH	
	Location: Meitingen	
Street:	Werner-von-Siemens-Str. 18	
Place:	D-86405 Meitingen	
Telephone:	+49 (0)8271-83-0	Telefax: +49 (0)8271-83-2466
Contact person:	Abteilung Arbeitssicherheit & Umweltschutz (EHS)	Telephone: +49 (0)8271-83-1512
e-mail:	MSDS_Meitingen@sglcarbon.de	
Internet:	http://www.sglgroup.com	
Responsible Department:	Abteilung Arbeitssicherheit & Umweltschutz (EHS)	

**1.4. Emergency telephone number:**

+49 (0)8271-83-1200

**SECTION 2: Hazards identification****2.2. Label elements****2.3. Other hazards**

May produce an allergic reaction. Carbon fibers are electrically conductive and may cause a short circuit in electrical equipment. Improve level of electrical protective measure. IP54 is demanded. Carbon fibers themselves are not classified as hazardous. However, in processing carbon fiber-reinforced materials, 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.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Chemical characterization**

Article based on Carbon fibers

REACH Article 33 (SVHC): This Product contains no chemical substance, that is listed in Article 59 (1, 10) of Regulation (EC) No. 1907/2006.

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**Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
231-153-3	Carbon (Carbon Fiber)	> 95%
7440-44-0		
01-2119966900-32		

Full text of R and H phrases: see Section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

none/none

**After inhalation**

Provide fresh air.

**After contact with skin**Gently wash with plenty of soap and water.  
Fibers may cause skin irritation.**After contact with eyes**

Rinse cautiously with water for several minutes.

**After ingestion**

Rinse mouth immediately and drink large quantities of water.

**4.2. Most important symptoms and effects, both acute and delayed**

none/none

**4.3. Indication of any immediate medical attention and special treatment needed**

none/none

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**Foam. Carbon dioxide (CO<sub>2</sub>). Extinguishing powder. Water spray.**Extinguishing media which must not be used for safety reasons**

High power water jet.

**5.2. Special hazards arising from the substance or mixture**Can be released in case of fire: Carbon dioxide (CO<sub>2</sub>). Sulphur dioxide (SO<sub>2</sub>). Carbon monoxide.  
Hydrocyanic acid (HCN)  
A: Solid material fires, mainly of organic nature, that normally burn with formation of embers.**5.3. Advice for firefighters**

In case of insufficient ventilation, wear suitable respiratory equipment. [EN 12021]

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Avoid generation of dust.

Wear personal protection equipment. Avoid generation of dust. Further remarks: Section 8

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For emergency personal:

Wear personal protection equipment. [DIN EN 469, EN 12021]

**6.2. Environmental precautions**

none/none

**6.3. Methods and material for containment and cleaning up**

Collect mechanically.

**6.4. Reference to other sections**

Additional information: Section 8 and 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

none/none

**Advice on protection against fire and explosion**

Dust should be vacuumed up immediately at the place it occurs.

Further remarks: Section 9 (Other information)

**Further information on handling**

Section 8.2 "General protection and hygiene measures:"

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

none/none

**Advice on storage compatibility**

none/none

**Further information on storage conditions**

none/none

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7440-44-0	Graphite, inhalable dust	-	10		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

**Additional advice on limit values**

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn.

**8.2. Exposure controls****Occupational exposure controls**"Dust: 10 mg/m<sup>3</sup> (inhalable); 3 mg/m<sup>3</sup> (alveolar) [TRGS 900]"

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

Hydrogen sulphide (H<sub>2</sub>S): 7.1 mg/m<sup>3</sup> (MAK)**Protective and hygiene measures**

none/none

**Respiratory protection**

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn. [EN 14387]

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**Hand protection**

Suitable gloves type:  
 NR (Natural rubber (Caoutchouc), Natural latex). NBR (Nitrile rubber). Butyl rubber.

**Eye protection**

Dust protection goggles.

**Skin protection**

Recommendation: Protective suit.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state: solid  
 Colour: grey / black  
 Odour: none/none

**Test method**

pH-Value: not applicable

**Changes in the physical state**

Melting point: not applicable  
 Boiling point: not applicable  
 Sublimation point: not applicable  
 Softening point: not applicable  
 Flash point: not applicable

**Flammability**

Solid: not applicable

**Explosive properties**

dust explosive (d=28 µm)

Lower explosion limits: 500 g/m<sup>3</sup>  
 Upper explosion limits: not applicable  
 Ignition temperature: none/none

**Auto-ignition temperature**

Solid: none/none

**Oxidizing properties**

none/none

Vapour pressure: not applicable  
 Density (at 20 °C): ~ 1.8 g/cm<sup>3</sup>  
 Water solubility: none/none  
 (at 20 °C)  
 Partition coefficient: not applicable  
 Viscosity / dynamic: not applicable

**9.2. Other information**

Carbon fibers are electrically conductive.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

none/none

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**10.2. Chemical stability**

No adverse effects known.

**10.3. Possibility of hazardous reactions**

none/none

**10.4. Conditions to avoid**

none/none

**10.5. Incompatible materials**

none/none

**10.6. Hazardous decomposition products**

none/none

**Further information**

none/none

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No toxicological data available.

Diameter of the fibers = 7 µm, do not fibrillize.

**SECTION 12: Ecological information****12.1. Toxicity**

No data available

**12.2. Persistence and degradability**

No adverse effects known.

**12.3. Bioaccumulative potential**

No adverse effects known.

**12.4. Mobility in soil**

No adverse effects known.

**12.5. Results of PBT and vPvB assessment**

No adverse effects known.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****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.

**Waste disposal number of used product**

040222 WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES; wastes from the textile industry; wastes from processed textile fibres

**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.

**SECTION 14: Transport information****Land transport (ADR/RID)****14.2. UN proper shipping name:**

Not a hazardous material with respect to these transportation regulations.

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**Inland waterways transport (ADN)****14.2. UN proper shipping name:** Not a hazardous material with respect to these transportation regulations.**Marine transport (IMDG)****14.2. UN proper shipping name:** Not a hazardous material with respect to these transportation regulations.**Air transport (ICAO)****14.2. UN proper shipping name:** Not a hazardous material with respect to these transportation regulations.**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Water contaminating class (D): - - not water contaminating

**Additional information**

Es gelten die "Mindeststandards für nicht lungengängige Fasern" gemäß TRGS 521 Nummer 4.

## 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 --&gt; EINECS/ELINCS

USA --&gt; TSCA

CAN --&gt; DSL

JPN --&gt; ENCS (Class 1 &amp; 2)

CHN --&gt; IECS

KOR --&gt; KECI

AUS --&gt; AICS

NZL --&gt; NZIoC / HSNO

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information****Abbreviations and acronyms**

"A - Alveolengängig; ADR - Accord européen relatif au transport international des marchandises Dangereuses par Route; bw - Body Weight; CAS - Chemical Abstract Service; CSR - Chemical Safety Report; DFG Deutsche Forschungsgemeinschaft; DIN - Deutsche Industrie Norm; DNEL - Derived No Effect Level; E - Einatembare; EAKV - Europäischer Abfallkatalog Verordnung; EC - Effective Concentration; EC - Effect Concentration European Commission; EINECS - European Inventory of Existing Commercial Chemical Substances; ELINCS - European List of Notified Chemical Substances; EN - Europäische Norm; LC - Lethal Concentration; LD - Lethal Dosis; NOAEL - No Observed Adverse Effect Level; OECD - Organization for Economic Cooperation and Development; PBT - Persistent, Bioaccumulative and Toxic; RE - Repeated Exposure; REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals;" "RID - Règlement concernant le transport international ferroviaire de marchandises dangereuses; SE - Single Exposure; STOT - Specific Target Organ Toxicity; TA - Technische Anleitung; UN - United Nations; VCI - Verband der Chemischen Industrie; vPvB - Very Persistent and very Bioaccumulative; VwVwS - Verwaltungsvorschrift wassergefährdender Stoffe;"

**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.

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