

1. Name of material, preparation method and manufacturer

1.1 Product data:

Trade name: **microlith® Filtration fibers SP 19**

1.2 Application: Filtration

1.3 Manufacturer / Supplier:

Glaswarenfabrik Karl Hecht GmbH & Co KG, Stettener Straße 22-24, D 97647 Sondheim/Rhön

Phone: ++49-(0)9779/808-0

Facsimile: ++49-(0)9779/808-88

2. Data on composition/ingredients

2.1 Description:

Products made of textile glass fibers with a nominal diameter of 8 - 50 µm. The products contain a maximum of 0.2 % of sizing (spinning agent) basing on polyglycols. The sizing does not contain any mineral oil.

2.2 Hazardous ingredients:	EINECS - No.:	Content %:	Hazard symbol:	R-settings:	Limit values, type:
N/A	---	---	---	---	---

2.3 Additional remarks:

3. Potential risks

3.1 Type of Risk: N/A

R-settings: N/A

3.2 Special risks to individuals and environment: N/A

4. First-Aid

4.1 General: Providing instructions for use are complied with, there is no need for First-Aid. Please note the information disclosed in points 7 and 8.

4.2 After inhalation: Normally not applicable.
 If necessary, take persons out in the open that they get some fresh air.

4.3 After skin contact: Normally not applicable.
 If necessary, remove mechanically.

4.4 After eye contact: Normally not applicable.
 If necessary, rinse with water for several minutes.

4.5 After swallowing: Normally not applicable.
 If necessary, wash mouth with water.

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4.6 Information for physician: Normally not applicable.

5. Fire fighting

5.1 Appropriate fire fighting media:

Adjust fire in the surroundings. The products are non-combustible.

5.2 Inappropriate fire fighting media (safety reasons): N/A

5.3 Particular risks specific to the product, its combustion products or developing gasses:

Under the influence of high temperatures, e.g. during a fire in the ware house decomposition products like carbon oxide may engender from the low organic content.

5.4 Required fire fighting PPE:

Wear self-supplied respiratory protector, complete protection depending on size of fire.

5.5 Additional information:

Dispose of contaminated water for firefighting according to the prescriptions of (local) authorities.

6. Actions on inadvertent release

Absorb by mechanical means and dispose of according to item 13. Avoid development of dust.
See also item 8.

7. Handling and storage

7.1 Safe handling information including technical safe guarding:

Increased mechanical stress of the filtration fibers may generate dust and airborne fibers which may cause discomfort. At skin contact, skin irritations are possible. Availability of a local suction is advised. The general hygiene rules and measures applying for the handling of chemicals must be employed.

See also item 8.

Fire and explosion related information:

The products are non-combustible.

7.2 Safe storage conditions:

Storage room/warehouse requirements:

Storage rooms must be well ventilated. Do not store product in passage ways and staircases; also do always store it in original packing which should be intact.

Incompatible materials/restrictions on combined storage: N/A

Storage conditions: Storage at room temperature and dryly. Protect against humidity.

Special requirements on electric systems and equipment: N/A

Static charge prevention: N/A

Storage class: 13

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8. Exposure control and Personal Protective Equipment (PPE)

8.1 Additional information for the design of technical equipment: See item 7.1

8.2 Substances with work-place related limit values/classification subject to control:

CAS-No., EINECS-No.:	Substance:	Max. worksite concentration (MAK)	Peak value:
---	General dust limit value: Respirable content (E): Alveola related content (A):	*	

* We attach a list of available limits for dusts for European countries to this MSDS.

Additional remarks:

The fibers processed in our products are uniform and are not subject to EC Guideline 97/69/EC. Furthermore, our products are not considered carcinogenic according to EC Guideline 1999/45/EC and TRGS 220 (Germany). The glass fibers processed in our products are produced according to a defined process and have a nominal diameter of 8 - 50 micron.

8.3 Personal Protective Equipment (PPE)

If the instructions of item 7.1 is complied with, PPE is not required.

Respiratory protection: At elevated airborne fiber and dust levels, we recommend to use a respiratory equipment (dust mask with fine filter according to EN 143), Filter P1 (EN 141).

Eye protection: In case of airborne fibers and dust, we recommend to wear safety glasses (EN 166).

Hand protection: We recommend safety gloves to avoid possible skin irritation (leather or cotton gloves).

Body protection: long-sleeved safety clothing as well as normal personnel protective equipment (e.g. safety boots EN 344)

General protection and hygiene:

Before breaks and after the end of the work day, wash hands thoroughly. In case of sensitive skin, apply a rich, protective hand lotion/cream. To protect against skin irritation, avoid wearing tight-fitting garments.

9. Physical and chemical properties

9.1 Appearance

Shape/State of aggregation: solid **Color:** transparent- white **Odor:** inodorous

9.2 **pH-Value** (2g in 100 ml of water, 20 °C): 9.0 – 9.5 (DIN 54276)

9.3 **Boiling point/boiling range:** N/A

9.4 **Melting point/melting range:** approx. 680 °C (softening point of glass)

9.5 **Flash point:** N/A

9.6 **Flammability:** The products are non-combustible.

9.7 **Ignition temperature:** N/A

9.8	Self-ignition:	N/A
9.9	Danger of explosion:	N/A
9.10	Explosion limits	lower: N/A upper: N/A
9.11	Fire promoting properties:	Cannot be applied according to the laws of the European Community.
9.12	Vapor pressure:	N/A
9.13	Density, expressed as bulk density (20 °C):	2.52 g/m ³ (raw glass)
9.14	Solubility in water:	insoluble
9.15	Solubility in fat:	insoluble
9.16	Distribution coefficient n-Octanol/water:	N/A
9.17	Other:	

10. Stability and reactivity

10.1	Conditions to be avoided:	humidity
10.2	Substances to be avoided:	When handled as instructed, none known.
10.3	Hazardous decomposition products:	N/A
10.4	Other:	These products are not reactive.

11. Toxicology data

11.1 Toxicological tests

Acute toxicity, e.g. LD ₅₀ :	no data available
Specific symptoms of animal tests:	no data available
Primary irritant/caustic action:	no data available
Sensitization:	no data available
Effects after repeated or prolonged exposure: (sub-acute to chronic toxicity)	no data available
Carcinogenic risks:	no, 97/69/EC
Genotype and reproduction risks:	no data available
Other:	See item 8.2

11.2 Practical experience

Classification specific information:	no data available
Other:	

11.3 General remarks:

12. Ecology data

12.1 Elimination data (Persistence and degradability):	no data available
12.2 Environmental behavior	

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Mobility: no data available
Bio-accumulation potential: no data available

12.3 Eco-toxicological effects

Aqueous toxicity: no data available
Behavior in sewage plants: N/A

12.4 Other ecological data:

CSB-Value: - mg/g **BSB₅-Value:** - mg/g **AOX-note:** N/A
General remarks:

13. Disposal

13.1 Product:

Waste Code No.: EWC-Code 101103
 Appropriate (waste) dump or garbage incinerating plant.

13.2 Impure packing/wrapping material:

Remove fibers remains from packing/wrapping material. Disposal/recycling according to Packing Material Ordinance.

Waste code No.: Waste type: Accountability:

14. Transport (national/international)

- 14.1 Overland: ADR/RID-, GGVS/GGVE-Class
- 14.2 Inland waterways: ADN/ADNR-Class
- 14.3 Overseas: IMDG/GGVSee-Class
- 14.4 Air: ICAO/IATA-Class
- 14.5 Transport/other info: Non-hazardous goods according to items 14.1 – 14.4.

15. Regulations

15.1 Identification according to EC Guidelines

Risk designation and alphabetical code: N/A
contains: N/A
R-settings: N/A
S-settings: N/A
Specific identification of certain preparations: N/A

15.2 National regulations:

Indications for employment limit: N/A
Ordinance conc. disruptive events: N/A

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Operating safety ordinance:	N/A
Technical instructions on maintaining air purity:	N/A
Water hazard class:	1 (according to VwVwS dd. 17.05.1999)
Other regulations, restrictions and prohibitions:	N/A

16. Other

Further information:

N/A = not applicable

Modification in comparison to Index 6: 1.4, 8.2, 11.1, 15.2

Please note:

Data quoted in this Safety Data Sheet relate exclusively to the filtration fibers described and not to a combination of this product with any other kind of substance, a different preparation, or a different material resp. process. The data describes issues relevant to safety according to the best of our knowledge as it is to date and are intended to protect human beings and the environment. They do not represent quality characteristics nor may they be construed as a release of responsibility when handling filtration fibers nor from compliance with existing legal regulations and obligations. The data address wholesalers and are not intended for private users.

Available limits to be monitored in European Countries (item 8.2)

Country	General limit for dust
Belgium	10 mg/m ³ inh., 3 mg/m ³ alv. (ACGIH, MAK)
Denmark	3 mg/m ³ (org. støv, total), 10 mg/m ³ (mineralsk, støv, inert), 5 mg/m ³ (mineralsk, støv, inert, respirable)
Germany	3 (6) mg/m ³ A, 10 mg/m ³ E (2.4 TRGS 900)
Finland	5 mg/m ³ (orgaaninen pöly), 10 mg/m ³ (epäorgaaninen pöly)
France	10,5 mg/m ³ inhalable, 3 mg/m ³ alvéolaire (MAK)
Greece	3 mg/m ³ áιάδί., 10 mg/m ³ άέόδί. (ACGIH, MAK)
Great Britain	10 mg/m ³ (inhal. dust), 4 mg/m ³ (respir. dust)
Ireland	10 mg/m ³ (total inhal. dust), 4 mg/m ³ (respir. dust)
Italy	10 mg/m ³ i., 3 mg/m ³ a. (ACGIH, MAK)
Croatia	There isn't a general limit for dust but only limits for special kinds of dust. recommendation: 3 (6) mg/m ³ A, 10 mg/m ³ E (like Germany)
Luxemburg	3 (6) mg/m ³ A, 10 mg/m ³ E (2.4 TRGS 900)
The Netherlands	10 mg/m ³ (inhaleerbaar), 5 mg/m ³ (respirabel)
Austria	6 mg/m ³ F (15 mg/m ³ G)
Poland	ogólna graniczna wartość pyłu = 10 mg/m ³ (Gesamtstaub)
Portugal	10 mg/m ³ i., 3 mg/m ³ a. (ACGIH, MAK)
Sweden	10 mg/m ³ (total damm), 5 mg/m ³ (respirabelt damm)
Slovakia	Všeobecná hraničná hodnota pre prach = 10 mg/m ³
Slovenia	Splošna meja prahu = 6 mg/m ³ (alveolengängige Fraktion)
Spain	10 mg/m ³ i., 3 mg/m ³ a.
Czech Republic	Obecná limitní hodnota prašnosti = 10 mg/m ³
Hungary	Általános porhatárérték = 10 mg/m ³ (Totális (belélegezhető)), 6 mg/m ³ (Respirabilis)