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## Section 1: Product and Company Identification

Product name	Basalt fiber products
Other names	Basalt Roving, Basalt Twisted Yarn, Basalt Filament Yarn, Basalt texturized Yarn, Basalt Fiber Fabric, Basalt Chopped Fibers
Supplier	Basalt Fibertec GmbH Eisenbahnstrasse 25 CH-4900 Langenthal Tel. +41 62 530 25 80
Product use	Industrial application

## Section 2: Composition/Information on Ingredients

Ingredients	>98.5% Pure Natural Basalt Rock < 1.5% Silane-based organic Sizing
Product info	Roving of continuous basalt fiber filaments with nominal filament diameter of 7-19 $\mu$ and moisture content below 0.1%, obtained from the melting of pure basalt rocks.  Silan-based Organic Coating is added onto the surface of each filament to protect it, to improve its workability and to ease handling
Basaltfiber CAS-Nr.	Not available

### Basalt Fiber Chemical Composition

Chemical formula	Percentage (%)	CAS-Number	EINECS-Number
SiO <sub>2</sub>	57.02	7131-86-9	231-545-4
Al <sub>2</sub> O <sub>3</sub>	18.90	1344-28-1	215-691-6
Fe <sub>2</sub> O <sub>3</sub>	4.00	1309-37-1	251-168-2
FeO	4.25	1345-25-1	215-721-8
CaO	7.35	1305-78-8	215-138-9
MgO	3.82	1309-48-4	215-171-9
Na <sub>2</sub> O	2.48	1313-59-3	215-208-9
K <sub>2</sub> O	1.09	12136-45-7	235-227-6
TiO <sub>2</sub>	0.81	13463-67-7	236-675-5
Andere	0.28	NA	NA



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## Section 4: First Aid Measures

General Information	Normally GBF Continuous Basalt Fibers has no health hazards from common use. It can cause irritation but it is typically enough to remove or wash away the fibers.
Eyes	Immediately rinse with abundant clean water and seek medical attention if symptoms of irritation appear.
Skin	Remove fibers from skin and wash with soap and clean water, use a towel to help removing fibers from skin. It is suggested to use gloves and wash working clothes after having worked for long time with GBF Continuous Fibers.
Ingestion	It is very unlikely to happen; seek medical attention.
Inhalation	GBF Continuous Basalt Fibers cannot be inhaled unless after being grounded into dust. If inhalation occurs seek medical attention

## Section 5: Fire-Fighting Measures

General Information	GBF Continuous Basalt Fiber is non-flammable and non-explosive. Packing material can burn.
Special fire fighting procedures	Nicht erforderlich. Verwenden Sie im Falle von Feuer normale Brandbekämpfungsmaßnahmen.
Unusual fire and explosion hazards	NA
Hazardous decomposition products	None

## Section 6: Accidental Release Measures

Accidental release measures: According to Section 8.

Avoid the spread of basalt fiber dust by recovering possible wastes under vacuum or wetting them with water or other dust suppressants before sweeping or sucking.  
Recover possible wastes and follow local, federal and state regulations to recycle them.

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## Section 7: Handling and Storage

Handling and Storage	No special handling and storage procedures are required for this material.
General precautions	Wash hands after having used the material, avoid contact with eyes, store in a dry place at room temperature and keep the material in its original package.

## Section 8: Exposure Controls/Personal Protection

Engineering controls	Handle the material using common industrial hygiene and safety practices, keep working place draughty, remove waste material from clothing and from working spaces by using vacuum equipment.
Respiratory protection	When the application causes the formation of dust, use an approved dust mask and employ suitable filters to machines and production environment.
Eye protection	Safety glasses or goggles are recommended, especially when the use of this material may cause the formation of dust.
Skin protection	Wear safety gloves; if required by the use wear protective rubber apron or suitable protective clothing to avoid possible irritations.
Work hygienic practices	Wash hands after having used the material keep work area clean, do not eat, drink or smoke while working with the product.
Exposure guidelines	GBF Continuous Basalt Fiber is uniform in diameter and is not subject to EC Guideline 97/69/EC.  Basalt fibers, classified as mineral fibers, are subject to TRK value of 250'000 fibers/m <sup>3</sup> according to TRGS 900

## Section 9: Physical and Chemical Properties

Appearance	Gold-bronze fibers
Odor	odorless
Physical state	solid
pH	NA
Boiling point	NA
Melting point	above 1450° C

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Freezing point	kein				
Flash point	Nicht brennbar				
Inflammation point	Non-combustible				
Self-inflammation point	Not self-inflammable				
Explosion limits	NA				
Density	2,63 g/cm <sup>3</sup>				
Solubility in water	insoluble				
Solubility in organic solvent	insoluble				
Distribution coefficient in octanol/water	NA				
Saturated vapour pressure	NA				

## Section 10: Stability and Reactivity

Stability	The material is stable in normal conditions of use.
Conditions to avoid (Stability)	NA
Incompatibility (material to avoid)	NA
Hazardous by-products	None
Hazardous Decomposition or polymerization	Will not occur
Condition to avoid (Polymerization)	NA

## Section 11: Toxicological Information

General information	Basalt fiber is not toxic
Acute toxicity	NA
Specific symptoms in animal tests	NA
Primary irritant/caustic action	NA
Sensitization	NA

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Effects after long-term exposure	NA				
Carcinogenicity	NA				
Mutagenicity	NA				
Effect on reproductivity	NA				
Neurotoxicity	NA				
Epidemiology	NA				
Teratogenicity	NA				

## Section 12: Ecological Information

General Information	GBF Continuous Basalt Fiber is a 100% natural material, which is obtained by melting natural volcanic rocks, with only the addition of a very low amount of artificial sizing resin after the formation of the filament. Therefore the material is not harmful to humans, animals or plants. It can be completely recycled through incineration.
Ecological toxicity	NA
Ecological degradation	NA
Biologic degradation	NA
Aquatic toxicity	NA

## Section 13: Disposal Considerations

Waste information	Basalt fiber is classified as a non-hazardous material.
Waste disposal method	This material must be disposed and recycled in accordance with local, state and federal regulations.
Packing material information	Packing material used for basalt fiber products' packaging is classified as non-hazardous
Packing material disposal method	This material must be disposed and recycled in accordance with local, state and federal regulations

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## Section 14: Transport Information

UN	NA
Packaging label	NA
Packaging category	NA
Road and Railway Transportation	Not classified as hazardous good for transport by road and railway.
Marine Transportation	Not classified as hazardous good by criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
Air Transportation	Not classified as hazardous good by criteria of the International Air Transport Association (IATA) for transport by air.

## Section 15: Regulatory Information

General Information	In accordance to current EC regulations, the material is inert. Refer to common precaution and local public regulations for handling of chemicals.
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## Section 16: Other Information

### General Disclaimer

The information contained herein is accurate to the best of our technical and scientific knowledge. However, neither the above named supplier nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or the completeness of the information reported herein. Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are only hazards that exist related to the use of this material.

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