

Safe Use Instructions Sheet (SUIS)

Mineral wool products from the **biosil®** series
– with mineral oil and/or as polymer composite –



Issue date: 22.04.2024

Section 0: Preface

In the European Union (EU), the obligation to provide a safety data sheet is specified under regulation (EC) No 1907/2006 (REACH). The mineral wool products described herein, consisting of biosoluble mineral fibers with mineral oil and/or as polymer composite with a thermally cured binder based on a synthetic phenol formaldehyde resin, do not meet the criteria to mandate the issuance of a safety data sheet.

On a voluntary basis, DBW Advanced Fiber Technologies GmbH decided to provide customers with a **Safe Use Instructions Sheet (SUIS)** to offer guidance for the safe processing of mineral wool products of the **biosil®** series.

These instructions do not release the customer of his due diligence to assess the hazards and aptitude of the **biosil®** products for the specific processing and intended use.

Section 1: Identification of the product and of the company

General description/scope:	Biosoluble mineral wool, with mineral oil and/or as polymer composite with cured synthetic resin, on its own or as part of an assembly
Trade names	biosil® PT0 loose mineral wool with mineral oil biosil® PTX mineral wool, polymer composite with variable synthetic resin (cured) content in the range X = 0,5 – 10 partly available in additional versions advanced and black
Intended use:	Thermal and acoustic isolation Industrial use
Manufacturer:	DBW Advanced Fiber Technologies GmbH Rodetal 40 37120 Bovenden Germany
Contact details:	Phone: +49 5594 801-0 Fax: +49 5594 801-74 E-mail: info@dbw.de

Section 2: Hazards identification

Classification according to (EC) No 1272/2008 (CLP):
not classified

Labelling according to (EC) No 1272/2008 (CLP):
not subject to mandatory labelling

Safety note:

The mechanic effect of coarse fibers can produce temporary itching after contact with the skin.

Section 3: Composition/information on ingredients

The product composition varies depending on the product line. The products may contain further constituents and additives not mentioned. The composition given in this section refers to the **biosil®** mineral wool component only and for products with binder only to **biosil®** products with the synthetic resin in its fully cured state. For assemblies or laminated products, the hazards of further components must be assessed separately.

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Composition mineral wool

Substance	Identifier	% (w/w)	Classification ⁽¹⁾
Man-made vitreous (silicate) fibers with random orientation with alkaline and alkali earth oxides (Na ₂ O + K ₂ O + CaO + MgO + BaO) content greater than 18 % by weight and fulfilling one of the Nota Q conditions ⁽²⁾	926-099-9 (EC number) 01-2119472313-44 (REACH-Reg.-nr. ⁽³⁾)	≥ 90	not classified ⁽²⁾
binder system, cured synthetic resin (PF)	–	≤ 10	not classified
mineral oil	–	≤ 0,5	not classified t

(1) Classification according to European regulation (EC) No 1272/2008 (CLP).

(2) Nota Q of the CLP specifies conditions for the exoneration of man-made vitreous fibers. Fibers fulfilling at least one of the criteria are not considered carcinogenic to humans (cf. sections [15](#) and [16](#)).

(3) Registration number according to European regulation (EC) No 1907/2006 (REACH) (cf. [section 15](#)).

Potential laminating materials: glass or polyester fleece, kraft paper, metal products, plastic films.

Section 4: First aid measures

Measures depending on route of exposure

- Inhalation:** Remove from exposure. Rinse throat with water and clean the nose to remove residual material.
- Skin Contact:** In case of itching, remove contaminated clothes and carefully clean the affected area with cold water and soap.
- Eye contact:** Rinse with clean water for at least 15 minutes.
- Ingestion:** In case of accidental ingestion, drink an ample amount of water.

If a negative reaction or physical discomfort due to exposure persists, seek medical advice.

Section 5: Firefighting measures

Suitable extinguishing media

Mineral fibers are not flammable. Laminating or packaging materials can potentially be combustible.

Suitable extinguishing media: water spray, firefighting foam, carbon dioxide (CO₂), dry powder

In poorly ventilated areas or if packaging material is affected, the use of a breathing apparatus can be necessary.

Combustion products of product and its packaging

Fumes consisting of carbon dioxide and trace gases, which may contain, among others, carbon monoxide, ammonia, nitrogen oxides, volatile organic compounds, and particulate matter.

Section 6: Accidental release measures

Personal safety

In case of potential exposure, safety measures outlined in [section 8](#) must be followed.

Environmental protection

Do not release into the environment/surface water/sewage system. Follow the instructions for disposal outlined in [section 13](#).

Cleaning measures

Use an industrial grade vacuum with high-performance filter (filter class M recommended) to recover fine material. If unavailable, fine material can be picked up moistened with water.

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Section 7: Handling and storage

Handling

- Safety precautions:** Avoid dust formation and direct skin contact. Provide adequate ventilation to the work area.
- Technical precautions:** Preferably, use a knife for cutting. Electric cutting tools must be equipped with adequate suction. In case of dust formation, ensure proper ventilation of the work area and monitor the occupational exposure via inhalation.
- Safe handling instruction:** Avoid unnecessary handling of the unpackaged product. Observe the safety instructions outlined in [section 8](#).

Storage

- Technical measures:** No special measures. Store products on stacked pallets according to site-specific risk assessment.
- Storage conditions:** Store products free from packaging in cool and dry environment.
- Incompatibilities:** Under recommended storage conditions, no known incompatibilities.
- Packaging:** The products are packaged with polyethylene foil (PE) or stacked on pallets with cardboard.

Section 8: Exposure controls/personal protection

Occupational Exposure

- Exposure limit value:** Observe national regulations and general dust limit values for occupational exposure. The hazard must be assessed for the specific processing and measures derived accordingly.
- General dust limit value (Germany, according to TRGS 900):
10 mg/m³ for respirable and 1,25 mg/m³ for alveolar fraction.

Personal protection equipment

- Respiratory protection:** In non-ventilated areas or for dust-producing processes, a disposable face mask (EN 149 FFP1) must be worn.
- Hand protection:** Wear gloves (EN 388) to protect from exposure and itching.
- Eye protection:** For work overhead or if at risk of exposure of the eyes, wear protective goggles (EN 166).
- Skin protection:** Cover exposed skin.
- Hygiene:** Rinse with cold water before washing with soap.

Section 9: Physical and chemical properties

Basic Properties

- Physical state at 20 °C:** solid
- Appearance:** fibers, loose wool with mineral oil or thermoformed polymer composite
- Color:** grey-yellow / grey-brown
- Smell:** A slight smell can occur.
- pH:** not applicable
- Flash point:** not applicable
- Flammability:** not flammable
- Explosion properties:** not applicable

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density (fiber):	2,5 – 2,7 g/cm ³
Water solubility:	not water soluble
Fat solubility:	not applicable

Product specific Properties

Estimated fiber diameter:	(3 – 35) µm
Fiber orientation:	random
Transformation temperature:	654 °C (according to DIN ISO 7884-8)
Biopersistence (half-life period)	< 40 days

Section 10: Stability and reactivity

Stability:	Binder decomposes at a temperature over 200 °C.
Hazardous decomposition products:	Decomposition at a temperature over 200 °C releases carbon dioxide and other potentially hazardous gases. The duration and amount depend on temperature, thickness of the insulation, and binder content.

Section 11: Toxicological information

Acute symptoms:	The mechanic effect of coarse fibers can produce temporary itching after contact with the skin.
Carcinogenicity:	The mineral fibers are not classified as carcinogenic to humans acc. to regulation (EC) No 1272/2008 (CLP), Nota Q. Cf. section 15 .

Section 12: Ecological information

Under intended use, mineral wool is not expected to be harmful to vegetation or wildlife.

Section 13: Disposal considerations

Residual material:	Dispose waste according to local regulations.
Contaminated packaging:	Empty the packaging completely and dispose separately according to local regulations.
Waste code number (EWC):	17 06 04 (recommended) or in consultation with a certified disposer. Laminating material may need a separate assessment.

Section 14: Transport information

Transport provisions:	not regulated
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Section 15: Regulatory information

According to *regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH)* vitreous fibers are classified as UVCB substance. The man-made vitreous fibers, that are the main component of mineral wool products, are registered with the competent authorities in accordance with REACH. The products described herein do not fulfil the requirements for the mandatory issuance of a safety data sheet.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP) specifies in its Nota Q exoneration criteria for man-made vitreous fibers. The mineral fibers used to produce biosil® products fulfil at least one of the conditions outlined in Nota Q and are not classified according to the CLP.

The **TRGS 900** (*Technische Regeln für Gefahrstoffe*, technical rules for hazardous substances) specify occupational exposure limit values in Germany. There is no limit value specific to the substance man-made

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vitreous fibers in it. The general dust limit value is applicable. For other countries, applicable national limit values must be observed instead.

Section: 16: Other information

IARC – International Agency for Research on Cancer of the World Health Organization (WHO)

The IARC, in monograph vol. 81 (*Man-made vitreous fibres*, IARC Working Group on the Evaluation of Carcinogenic Risks to Humans (2002: Lyon, France)), published a treatise on the carcinogenic potential of man-made vitreous fibers. Their analysis of a large amount of data concerning the long-time exposure of affected industrial workers did not show an increase in their carcinogenic risk related to the inhalation of fibers. Subsequently, the IARC does not categorize man-made mineral fibers as either carcinogenic or suspected to be carcinogenic to humans.

RAL certification

RAL *Deutsches Institut für Gütesicherung und Kennzeichnung e.V.* awards manufacturers of mineral wool with the certification RAL-GZ 388 „Erzeugnisse aus Mineralwolle“ (www.ral-mineralwolle.de). By RAL acknowledged organizations ensure continuous fulfilment of the quality criteria after the initial certification. Sampling and supervision are executed by independent institutes with the suitable qualification. Additionally, mineral wool manufacturers under RAL certification are obligated to install suitable measures for self-supervision. The certification is a voluntary self-imposed commitment by the mineral wool industry to ensure consistent standards and transparency.

The certified manufacturers commit to

- using laboratories acknowledged by RAL.
- ensuring the continuous fulfilment of the exoneration criteria initially specified in European directive 97/69/EC, now enforced via European regulation (EC) No 1272/2008, Nota Q.
- being reviewed by an independent institute acknowledged by RAL, twice per year and production site and in irregular intervals.
- installing regulations and measures for self-supervision at each production site.

Any mineral wool products manufactured by DBW Advanced Fiber Technologies GmbH at the issue date use man-made vitreous fibers exonerated from classification and certified with „Erzeugnisse aus Mineralwolle“ by RAL. Certified products can be recognized by the mark below on the label or packaging.



Disclaimer

The information given in the present Safe Use Instructions Sheet is – to the best of our knowledge, information, and belief – correct at the issue date. The instructions pose a basis for the safe handling, use, processing, storage, transport, disposal, and procedure in case of accidental release. The instructions do not release the user of any due diligence assessing potential hazards, especially related to the specific processing, and intended use. They do not constitute a warranty or quality specification. The information only refers to the specified material and not any material in combination unless otherwise stated.