



KROSGLOSS

SAFETY DATA SHEET

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Compliant with Regulation (EU) 878/2020 (of 18 June 2020)

Regulation (EC) 1272/2008 (CLP) – Poland

Regulation (EU) 453/2010

SECTION 1: Identification of substance/mixture and company identification.

1.1. Product identifier.

Trade name: ECR-glass fiberglass

Product names: Glass roving, texturized roving, chopped strand fiberglass, chopped strand mat, woven roving.

Fiberglass is not subject to classification for 'hazardous substances' in accordance with 67/548/EEC. Fiberglass does not have a CA number, CAS number nor EPA code number. Glass and glass components have been registered in EINECS with the number 65997-17-3.

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

Reinforcement of plastics, production of laminates and multilayer composites.

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

KROSGLOSS S.A.

Ul. Tysiąclecia 17

38-400 Krosno

phone (013) 43 285 03

fax. (013) 43 285 04

e-mail: krosglass@krosglass.com.pl

1.4. Emergency telephone number: 998

Section 2: Hazards identification.

2.1. Classification of the substance or mixture:

For people: Contact with fiberglass can sometimes cause skin irritation and much less often eye problems, and nose and throat complaints. The substance can be absorbed mainly by inhalation, however, fiberglass produced by KROSGLOSS S.A. (due to its diameter above 6 μm , i.e. greater than 3 μm adopted as a limit value) is not absorbed into the body by inhalation. The same applies to normal industrial processing.

Symptoms with excessive contact: rash, itching, cellulitis, coughing, sneezing.



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Studies conducted for many years among people working in fiberglass production have not provided any evidence that contact with fiberglass leads to malignant or benign respiratory diseases. Current studies show that the occurrence of cancer is not related to working in the fiberglass production. Also, animal studies (inhalation of glass fibres) have not shown carcinogenic effects of fiberglass. The International Agency for Research on Cancer (IARC) classified continuous glass fibres as group 3, i.e. as not carcinogenic to humans.

For the environment:

The product is stable and non-flammable under normal industrial conditions. When exposed to a long-lasting fire, dangerous combustion products from binder and sizing may escape into the air. The content of binder and sizing in the product, however, is small. In the case of waste disposal, fiberglass should be treated as inert solid waste. There is no need for special provisions for its disposal or destruction. Local regulations should be followed.

2.2. Label elements:

EEC label classification:

No hazardous substances/preparations.

2.3. Other hazards:

No data available.

Section 3: Composition/information on ingredients.

3.1. Mixtures.

ECR-glass fiberglass

The product consists mainly of oxides: silicon oxide, aluminium oxide, calcium oxide, magnesium oxide – it is an amorphous vitreous state.

[% by weight]

Min. 88 % - for mats

Min. 97.75 % - for other

Sizing/binder

A complex mixture consisting mainly of silane and polymers.

3 – 12 % – for mats

0.15 – 2.25 % - for rovings and woven roving



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Section 4: First aid measures.

4.1. Description of first aid measures.

After inhalation:

If the irritation persists, seek medical advice. KROSGLOSS S.A. produces fiberglass with a diameter larger than that assumed to be the upper limit allowing absorption into the body through the respiratory tract.

After skin contact:

Wash the place of contact with soap and water (room temperature), if the fiberglass sticks into the skin, seek medical advice.

After contact with eyes:

Wash the eye immediately for 15 minutes, using plenty of clean, running water – seek medical advice.

When swallowed:

Seek medical advice.

4.2. Most important symptoms and effects of exposure, both acute and delayed.

No data available.

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

Treating symptoms. Primary medical care.

Section 5: Firefighting measures.

The product as a whole is non-flammable, in the case of prolonged contact with fire, there is a possibility for combustion products of binder and sizing to be released into the air. In case of prolonged contact of the product with fire, wear independent breathing apparatus.

5.1. Extinguishing media:

Not applicable.

5.2. Special hazards arising from the substance or mixture:

Not applicable.

5.3. Advice for firefighters:

Standard procedure in case of fire.

Section 6: Accidental release measures.

The product does not cause environmental contamination.

6.1. Personal precautions, protective equipment and emergency procedures:

No special precautions are provided for.

6.2. Environmental precautions:

No special precautions are provided for.



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6.3. Methods and materials for containment and cleaning up:

Treat as inert solid waste in accordance with local regulations.

6.4. References to other sections

Section 7: Handling and storage of substances and mixtures.

7.1. Precautions for safe handling:

No special precautions are required for movement with regards to health and safety of the product which should be regarded as a substance not absorbed into the body by inhalation but likely to cause irritation of the skin, nose and throat on direct contact.

7.2. Conditions for safe storage, including any incompatibilities:

KROSGLOSS S.A. products should be stored in dry, enclosed rooms; for optimal conditions it is recommended to store products at temperatures below 25°C and in relative humidity below 65%.

7.3. Specific end uses:

Fiberglass tends to electrify, so electrostatic discharge can occur at a certain weight.

Section 8: Exposure controls/personal protection.

8.1 Control Parameters:

National limit values. Occupational exposure limit values (maximum concentration in the work environment).

Data is not available.

8.2. Exposure controls

Respiratory protection:

It is usually not needed, but when the concentration of fiberglass in the air exceeds the permissible value (defined by local regulations), e.g. with continuous chopping of fiberglass, the respiratory tract should be protected against fiberglass dust as a substance that may cause irritation. In such cases, it is also recommended to use a ventilation system that extracts fiberglass dust to the outside. US authorities (ACGIH) have set the permissible limit value for the content of fiberglass in air - TLV (Threshold Limit Value) at 10 mg/m³ for a period of 8 hours. This value has been adopted by many countries.



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A distinction should be made between inhaled fiberglass (with less than $3\mu\text{m}$ in diameter) and non-inhalable fiberglass. KROSGLOSS S.A. produces only fiberglass with a diameter of more than $6\mu\text{m}$, which is non-inhalable.

- Hand protection:** To avoid skin irritation use protective gloves, one can use protective cream for hands.
- Eye protection:** In the case of processing resulting in excessive dust (e.g. chopping), wear safety goggles with side flaps.
- Body protection:** Loose clothing is recommended to prevent contact of the fiberglass with the skin (sweatshirts with cuffs, long trousers, etc.)
- Special protection and hygiene measures:** Follow basic rules of good personal hygiene. Take breaks from work to regenerate the skin. Protective skin prophylaxis (protective ointments/creams) is recommended.

Section 9: Physical and chemical properties.

9.1. Information on basic physical and chemical properties

- | | |
|--|---|
| 9.1.1. Physical state: | solid |
| 9.1.2. Colour: | white, slightly yellow |
| 9.1.3. Odour: | odourless |
| 9.1.4. Melting point/freezing point: | not specified |
| 9.1.5. Boiling point and boiling range: | not applicable |
| 9.1.6. Flammability of materials: | non-flammable |
| 9.1.7. Lower and upper explosion limits: | non-flammable |
| 9.1.8. Flash point: | non-flammable |
| 9.1.9. Auto-ignition temperature: | non-flammable |
| 9.1.10. Decomposition temperature: | not applicable |
| 9.1.11. pH: | not applicable |
| 9.1.12. Kinematic viscosity: | not applicable |
| 9.1.13. Solubility: | insoluble in water, sizing and binders applied to fiberglass are soluble in styrene, acetone and methylethylketone. |
| 9.1.14. n-octanol/water partition coefficient: | not applicable |
| 9.1.15. Vapour pressure: | not applicable |
| 9.1.16. Density: | approx. 2.67 g/cm^3 |
| 9.1.17. Relative vapour density: | not applicable |
| 9.1.18. Molecular characteristics: | not specified |



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9.2. Other Information

9.2.1. Information on physical hazard classes: no additional information available

9.2.2. Other safety features:

Electrical conductivity:

ECR glass is a dielectric

Volatile substances content:

when sizing and binder are decomposing at high temperatures:

Mats - max. 8%

Other - max. 2%

Evaporation:

Depending on the product, they contain max. 25% moisture

Section 10: Stability and reactivity.

10.1. Reactivity:

The product does not react under normal conditions of use, storage and transport.

10.2. Chemical stability:

Stable under normal ambient conditions.

10.3. Possibility of hazardous reactions:

No known hazardous reactions under normal conditions of use.

10.4. Conditions to avoid:

There are no known specific conditions that should be avoided.

10.5. Incompatible materials:

Unknown

10.6. Hazardous decomposition products:

In the event of a prolonged fire, hazardous combustion products may be released from binders/sizing (see Section 5)

Section 11: Toxicological information.

These products are not classified as "hazardous" under the Seventh Amendment to 67/548/EEC.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

The product does not satisfy the criteria for classification in accordance with Regulation (EC) 1272/2008.

11.1.1. Acute toxicity:

The product is not classified as toxic.

11.1.2. Skin corrosion/irritation:

Fiberglass can cause skin irritation, but it is not classified as corrosive to the skin.

11.1.3. Serious eye damage/eye irritation:

Contact with fiberglass dust (especially while chopping) can cause eye irritation.



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11.1.4. Respiratory or skin sensitisation:

Fiberglass can penetrate the human body, mainly through the respiratory tract. Fiberglass with a diameter of less than 3 µm is classified as absorbable into the human body through the respiratory tract. KROSGLOSS S.A. produces fiberglass with a diameter greater than or equal to 6 µm, so it is not absorbed into the body. At the toxicology meeting on 3-4 February, 1994, in Paris, it was reported that glass fibers that are not absorbed into the body cannot cause respiratory diseases.

KROSGLOSS S.A. fiberglass is not classified as respiratory or skin sensitizer.

11.1.5. Mutagenic and carcinogenic:

Studies in animals exposed to inhalation of fiberglass have not shown that fiberglass has induced carcinogenic reactions. Studies in which glass fibres were artificially introduced or injected into the body led to cancer in test animals. However, because humans are not intentionally injected with glass fibers in this way, the results of the above-mentioned studies were not classified as related to humans.

The International Agency for Research on Cancer (IARC) has classified continuous fiberglass in group 3 as a non-human carcinogen. This means that there is not enough evidence to link fiberglass to cancer.

Fiberglass produced by KROSGLOSS S.A. is not classified as mutagenic and carcinogenic.

11.1.6. Reproductive toxicity:

Fiberglass produced by KROSGLOSS S. A. is not classified as acting on germ cells.

11.1.7. Specific target organ toxicity — single exposure:

Not classified.

11.1.8. Specific target organ toxicity — repeated exposure:

Not classified.

11.1.8. Aspiration hazards:

Not classified.

11.2. Information on other hazards

11.2.1 Endocrine disrupting properties

The product does not have any endocrine disrupting properties.

11.2.2. Other Information

No data available.



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Section 12: Ecological information.

Fiberglass is generally considered to be environmentally neutral and should be treated as inert solid waste. There is no need for specific rules on discarding or disposal of waste. Apply local regulations.

12.1. Toxicity

The product is not considered toxic to aquatic organisms and it does not cause long-term, adverse changes in the natural environment.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulation

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Endocrine disrupting properties

Not applicable.

12.7. Other adverse effects.

The product does not have a destructive effect on the ozone layer.

Section 13: Disposal considerations.

13.1. Waste treatment methods

For product residues (waste):

Treat as environmentally neutral solid waste.

Recommended regulations:

Comply with local regulations.

Safe conditions:

No special requirements.

Code of the European Waste Catalogue:

10 11 03 –Glass fibre waste and fibreglass fabrics waste.

For uncleaned packaging:

Observe local regulations as with product residues.

Section 14: Transport information.

14.1. UN number or ID number

Not applicable. The product is not subject to transport regulations.

14.2. UN proper shipping name

Not assigned. The product is not considered as hazardous according to transport regulations.



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14.3. Transport hazard class(s)

None.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

The product does not pose a threat to the environment, in accordance with the regulations on hazardous goods.

14.6. Special precautions for users

Use covered means of transport. There are no special regulations or restrictions for the transport of fiberglass.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

Section 15: Regulatory information.

15.1. Safety, health and environmental regulations/legislation specific to the substance or mixture.

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), establishing a European Chemicals Agency. (Official Journal of EU, L 396, 30 December 2006 and Corrigendum in OJ. EU, L 136 of 29 May 2007 as amended)

Not listed.

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending the Regulation of the Authorisation and Restriction of Chemicals (REACH).

Not listed.

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. EU Series L No. 353 of 31 December 2008 as amended)

Not classified.

The legally binding information is entered in the EINECS under the number 65997-17-3.



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15.2. Chemical safety assessment

No chemical safety assessment has been conducted.

Section 16: Other information.

The product does not require labelling according to the Hazardous Substances Ordinance. It does not require REACH registration.

Disclaimer: This information is based on the current state of our knowledge. This safety data sheet has been prepared for this product and is intended for this product only.



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