Safe Use Instruction Sheet

Section 0: GENERAL INFORMATION

The Safe Use Instruction Sheet (SUIS) is a document provided by Kingspan Mineral Insulation to communicate recommended safe handling and use instructions for manufactured articles.

According to the European Regulation (EC) on Chemicals 1907/2006 (REACH), which was enforced on June 1, 2007, a Safety Data Sheet (SDS) is only required for hazardous substances and preparations. The products within this SUIS are not considered hazardous articles, and therefore are exempted from REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals), as an SDS is not legally mandated. Consequently, a Safe Use Instruction Sheet is provided instead to ensure users are informed about the safe usage of the product. This proactive approach by Kingspan Mineral Insulation helps to maintain safety standards and provides guidance in the absence of an SDS.

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: Envertek Mineral Wool
Synonyms: Rock mineral fibre slabs, Stone Wool, Rock Wool, Boards, Sheets, Plates
Product type: Rock mineral fibre slabs produced in the Ronneburg (DE) plant only

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

Relevan identified uses: Building insulation material, roof insulation, Sound-and fire insulation, Thermal insulation, Industrial insulation.
Use advised against: other than recommended.

1.3 Details of the supplier of the SUIS

Manufacturer:
Kingspan Mineral Insulation GmbH
Paitzdorfer Straße 62
07580 Ronneburg
Germany

E-mail address of the person responsible for the SUIS: cs.kmi@kingspan.com

1.4 Emergency telephone number

During office working hours (Mon-Fri 08.00 - 16.00) - +49 15114480171
24 hours a day - 112 – emergency

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008 Physical hazards:
Does not meet the classification criteria.
Health risk: Does not meet the criteria for classification.
Environmental hazards: Does not meet the classification criteria.

Additional information: Exposure to coarse fibres, such as those from rock mineral fibre, can cause symptoms like itching, pain, and a rash. These fibres can penetrate the skin's outer layer, resulting in discomfort and, in some cases, a visible rash. When the mineral rock fibres are heated above 140-170°C, binding products may be released (these temperatures should not be reached when the materials are used correctly within their intended field of application). If present in high concentrations, these substances can irritate the eyes and respiratory system, potentially causing symptoms such as sore throat, burning eyes, and cough. It is important to handle such materials with care and follow safety guidelines to minimize exposure and health risks.

2.2 Label elements

Hazard pictograms: Not required

Signal word: Not required

Hazard statements: The mixture is not classified as hazardous according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP).

Precautionary statements: Not required

2.3 Other hazards

Respiratory Irritation: Rock mineral fibres can cause respiratory irritation if inhaled. It is important to use proper respiratory protection during handling to prevent inhalation of fibres.

Skin and Eye Irritation: Contact with rock mineral fibres can cause temporary itching and irritation to the skin, eyes, and throat. Protective clothing, gloves, and eye protection are recommended during handling and installation.

Section 3: COMPOSITION/INFORMATION ON INGREDIENT

Substance Name	Classification (EU Regulation (CE Nr.1272/2008)	Content by Weight (%)
Rock Mineral Fibre WE 926-099-9 Index number: not applicable Registration numbers: 01-211-947-2313-44-XXXX	Not Classified	**95-100%**
Organic binding material	Not Classified	**0-5%**
Mineral Oil	Not Classified	**0-0,5%**

- The products do not contain any SVHC (Substances of Very High Concern) or CMR (carcinogenic, mutagenic, or reproductive toxic) substances above 0.1% according to the REACH Regulation.
- The products do not contain any substances classified under the CLP Regulation above 0.1%.
- Possible coating materials include mineral fleece, coated aluminium, coated mineral fleece, and plaster.

Section 4: FIRST AID MEASURES

4.1 Description of first aid measures

Following inhalation	• Remove from exposure. • Rinse the throat and clear dust from airways. • If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.
Following eye contact	• Rinse out with plenty of water. Remove contact lenses. • If necessary, seek medical advice.
Following skin contact	• Take off immediately all contaminated clothing. • Rinse skin with water/ shower.
Following ingestion	• Rinse mouth with water (only if the person is conscious). • Do NOT induce vomiting.
Self-protection of the first aider	• Remove from the danger area, rinse mouth, throat, and clean nose.

4.2 Most important symptoms and effects, both acute and delayed

The mechanical effect of coarse fibres in contact with throat, skin or eyes may cause temporary itching/ inconvenience.

4.3 Symptoms due to excessive exposure

After inhalation: No specific data available.

After eye contact: Tearing, redness, irritation.

In case of skin contact: Frequent or prolonged contact may cause dryness, redness of the skin.

After swallowing: No specific data available.

4.4 Indication of any immediate medical attention and special treatment needed

When handling mineral wool, the most common indications for immediate medical attention or special treatment are generally not required. However, if symptoms persist, it is advisable to consult a doctor. Here are some specific situations where medical attention may be needed:

- **Respiratory Discomfort:** If someone has trouble breathing, persistent coughing, or any other respiratory issues after exposure to mineral wool.
- **Persistent Skin Irritation:** While temporary itching is common, if skin irritation persists or if there is a rash that does not improve.
- **Eye Irritation:** If particles of mineral wool get into the eyes and cause persistent redness, pain, or vision changes.
- **Ingestion:** In the unlikely event that mineral wool is ingested and causes gastrointestinal discomfort or distress.

Section 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Use water, foam, carbon dioxide (CO_2), or fire extinguishing powder as appropriate. There or no unsuitable extinguishing media known.

5.2 Special hazards arising from the substance or mixture

Rock mineral fibre is recognized for its excellent fire safety characteristics, primarily because it is classified as a Euro class A1 product according to EN 13501-1 standards. This classification indicates that the material is non-combustible, meaning it does not contribute to fire load or fire spread. During testing, Euro class A1 materials must not sustain flaming, and they are subject to rigorous assessments that measure their reaction to fire, including non-combustibility tests and determination of the gross heat of combustion. These tests ensure that the material meets the highest safety standards in terms of fire behaviour, making it a reliable choice for fireproofing in construction. Additionally, the Euro class system provides a harmonized approach to classifying product fire performance across the European Union, enhancing the safety of buildings and their occupants.

Mineral wool, commonly used for insulation, is classified as non-combustible under Euro class A1 standards due to its reaction to fire performance. However, it contains organic materials that can undergo smouldering combustion, a slow, low-temperature form of combustion. This process can generate additional heat, potentially increasing the temperature of surrounding materials, such as chimney penetrations, by over 100°C temporarily. Despite this, current European fire classification standards do not specifically address the control of mineral wool smouldering. Additionally, while rock mineral fibre insulation is effective in reducing heat transfer and does not produce harmful smoke or toxic gases, it can contribute to the overall heat during a fire.

5.3 Advice for firefighters Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

The unfaced products are non-combustible, some packaging materials or facings may however be combustible.

See 5.2 for understanding the behaviour of materials like rock mineral fibre under fire conditions as it is crucial for improving fire safety standards and preventing fire hazards.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Keep out of reach of unauthorised personnel. Avoid direct contact with the product, ensure adequate ventilation. Use appropriate personal protective equipment. Only trained personnel may carry out remedial work on the product and its consequences. In case of presence of high concentrations of dust, use the same personal protective equipment as mentioned in section 8.

6.2 Environmental precautions

If large quantities of the product are released, do not allow it to spread in the environment.

6.3 Methods and materials for containment and cleaning up

Clean with a vacuum cleaner before sweeping or moisten with a water spray to prevent dust dispersal. Treat collected material as waste.

6.4 Reference to other sections

For personal protective equipment and how to handle the product, see sections 7 and 8. Indications about waste treatment see section 13.

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

- Minimize handling: Once unwrapped, handle stone wool as little as possible to reduce the release of fibres and dust.
- Ventilation: Ensure the workspace is well-ventilated to disperse any fibres or dust that may be in the air.
- Always wear protective gear, such as masks and gloves, to avoid inhaling or coming into contact with dust from mineral fibres.
- Ensure proper ventilation in the work area to disperse any airborne particles.
- Teamwork: For heavier pieces of stone wool, always work with a partner to avoid exceeding weight limits and reduce the risk of injury.

Measures to prevent fire:

- Stone wool is non-combustible and contributes to fire safety in buildings by limiting the spread of fire and maintaining its integrity for extended periods during a fire.
- Due to its high melting point and thermal insulation properties, stone wool is considered a natural fire barrier, often used to protect combustible elements and steel structures.
- Cling film packaging, on the other hand, requires additional fire protection measures to prevent ignition and fire spread.
- It is important to ensure that the cling film packaging is adequately protected with to maintain overall fire safety.

Measures to prevent aerosol and dust generation:

- Use a vacuum cleaner with a HEPA filter to clean up any dust. Alternatively, lightly mist the stone wool with water to prevent dust from becoming airborne.

Measures to protect the environment:

- Always cut mineral wool insulation on a hard, clean surface to ensure all fibres can be collected and vacuumed afterwards.
- Avoid cutting mineral wool on soil or grass as it makes fibre collection difficult and can lead to environmental contamination.
- Cleaning up mineral wool fibres should not be done with high-pressure water as it can lead to contaminated wastewater and potential environmental hazards.

Advice on general occupational hygiene:

- Avoid eating, drinking, or smoking in areas where mineral fibre dust may be present to prevent ingestion.
- Before breaks or mealtimes, remove any clothing that may have been contaminated with dust to reduce the risk of ingestion.
- Rinse hands with cold water initially, which helps wash of fibres and prevent pores from opening and absorbing contaminants, followed by washing with warm water and soap to thoroughly clean the skin.

7.2 Conditions for safe storage, including any incompatibilities

The product may be stored outdoors in an intact, originally packed pallet. It must be protected from the harmful effects of the weather and placed on dry and stable ground. Maximum stacking height for pallets of up to three metres. The guaranteed shelf life for uninstalled material is six months from the date of manufacture stated on the packaging. When this period is exceeded, it is recommended that the product be re-examined.

7.3 Specific end use(s)

Recommendations: unavailable
Industry-specific solutions: unavailable

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits: Currently, there are no specific occupational exposure limits established for this material.

8.2 Exposure controls

Appropriate engineering controls:

Substance/Mixture Related Measures to Prevent Exposure During Identified Uses:

Storage: Store mineral wool insulation in a dry, well-ventilated area away from direct sunlight and moisture. Keep it in its original packaging to prevent contamination.

Handling: Use mechanical aids (such as trolleys or lifts) to move heavy packs of insulation. Avoid dropping or crushing the material.

Disposal: Follow local regulations for disposal. Dispose of waste mineral wool properly to prevent environmental contamination.

Structural Measures to Prevent Exposure:

Ventilation: Ensure adequate ventilation in work areas where mineral wool is handled. Use local exhaust ventilation (LEV) systems to capture airborne fibres.

Enclosures: Enclose areas where insulation is being installed to prevent fibres from spreading to other parts of the building.

Barrier Systems: Install barrier systems (such as plastic sheeting) to separate work areas from occupied spaces.

Organizational Measures to Prevent Exposure:

Training: Provide training to workers on safe handling practices, including proper use of PPE and hygiene measures.

Work Procedures: Develop clear work procedures for handling, cutting, and installing mineral wool insulation.

Supervision: Ensure that supervisors monitor compliance with safety protocols.

Technical Measures to Prevent Exposure:

Dust Suppression: Use water mist or wet methods during cutting or shaping to suppress dust generation.

Vacuum Systems: Use vacuum systems with HEPA filters to clean up dust and debris.

Personal Protective Equipment (PPE): see point below 8.2.2

Personal protection equipment:

Eye and face protection: Safety goggles or glasses with side shields to protect against fibrous dust.

Skin protection: Long-sleeved shirts and long pants to cover as much skin as possible.

Hand protection: Durable work gloves, preferably with a grip feature to handle materials safely.

Other skin protection: A hat or hood to cover the head and neck area, especially when working overhead.

Respiratory protection: A disposable dust mask or half-face respirator with a FFP2 filter or better to prevent inhalation of fibres.

Thermal hazards: Mineral wool is non-combustible but wearing natural fibre clothing (like cotton) can provide additional protection against thermal risks.

Environmental exposure controls:

There are no specific environmental exposure controls for rock mineral fibre, precautions should be taken to avoid contamination of plants, soil, (ground) water, drains and other surfaces.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid at standard conditions of temperature and pressure
Colour	Natural beige/brown or light grey colour (colour may vary slightly depending on the type and production process)
Odour	
Melting point/freezing point	Not applicable
Boiling point or initial boiling point and boiling range	> 1000°C
Flammability	The substance is not flammable. Ability to ignite under the influence of an ignition source. Based on its chemical structure, the substance has no pyrophoric properties and does not release flammable gases when in contact with water.
Lower and upper explosion limit	No information available
Flash point	No information available
Auto-ignition temperature	No information available
Auto-ignition temperature	No information available
pH	Not applicable
Kinematic viscosity	Not applicable
Solubility	Insoluble in water
Partition coefficient n-octanol/water (log value)	Not applicable
Vapour pressure	Stable product, no vapour pressure available
Density and/or relative density	Can vary depending on the product, typically, the density ranges from 10 to 250 kg/m^3. This variation allows for different applications and performance characteristics.
Relative vapour density	Not applicable
Particle characteristics	No information available

9.2 Other information

Composition: Made from natural minerals like volcanic rock, typically basalt or dolomite, and may include recycled rock fibre and slag residues from the metal industry. Non-Hazardous resins are mainly added for binding, hydorphobic, curing and stabilization purposes.

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity

No test performed because the persistence of the substance is not critical.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature). No hazardous reaction when handled and stored according to provisions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Avoid high flame ignition sources, temperatures and direct sunlight.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Stable under intended conditions of use.

Section 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity (oral)	No classification determined
Acute toxicity (inhalation)	No classification determined
Acute toxicity (dermal)	No classification determined
Skin corrosion/irritation	No classification determined
Serious eye damage/eye irritation	No classification determined
Respiratory or skin sensitisation	No classification determined
Germ cell mutagenicity	No classification determined
Carcinogenicity	No classification determined
Reproductive toxicity	No classification determined
Specific target organ toxicity - single exposure	No classification determined
Specific target organ toxicity - repeated exposure	No classification determined
Aspiration hazard	No classification determined

11.2 Information on other hazards

- **Respiratory Discomfort:** Inhalation of dust particles can cause trouble breathing, persistent coughing, or any other respiratory issues after exposure to mineral wool.
- **Persistent Skin Irritation:** Fibre dust can cause mechanical irritation, temporary itching and in some cases in a rash.
- **Eye Irritation:** Particles of mineral wool can get into the eyes and cause persistent redness, pain, or vision changes.
- **Ingestion:** when mineral wool is ingested it can cause throat irritation and stomach/ gastrointestinal discomfort or distress.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Not deemed to be toxic

12.2. Persistence and degradability:

Not degradable

12.3. Bio accumulative potential:

Not applicable

12.4. Mobility in soil

The product released to the environment is expected to become inseparably bound to soil or sediment due to its similarity to the inorganic matter of the soil/sediment and will be subjected to natural processes in the environment (cation exchange, sedimentation).

12.5. Results of PBT and vPvB assessment:

Not applicable

12.6. Results of PBT and vPvB assessment:

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects:

Not available

Section 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal:

Waste codes / waste designations according to LoW:
rock mineral fibre slabs: EWC 17 06 04 (Uncontaminated and dry slabs can be reused)
(Insulation materials other than those mentioned in 17 06 01 and 17 06 03)
Packaging materials must be sorted as plastic (EWC 15 01 02 or EWC 17 02 03)

13.1.2 Waste treatment-relevant information:

Clean the workplace regularly, cleaning prevents the accumulation of dust, debris, and potential hazards. Immediate disposal of cut-offs and waste into designated containers, such as bins, containers or plastic bags, minimizes the risk of dust and fibres.

13.1.3 Sewage disposal-relevant information:

Sewage or drain disposal is discouraged

13.1.4 Other disposal recommendations:

If disposal for recycling purposes keep following in mind to separate glass wool and stone wool. (Can be differentiated by colour and density)

Section 14: TRANSPORT INFORMATION

14.1 UN number or ID number: Not applicable

14.2 UN proper shipping name: Not applicable

14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: No hazards detected

14.6 Special precautions for user: Not applicable

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 for the substance or mixture

Kingspan rock mineral fibre insulation materials are declared as articles under the REACH Regulation (EC) No. 1907/2006. All components are not subject to classification and labelling requirements under the CLP Regulation (EC) No. 1272/2008. Consequently, there is no legal obligation to provide a safety data sheet.

According to the REACH Regulation (EC) No. 1907/2006, it is not necessary to create a safety data sheet for an article. Kingspan rock mineral fibre insulation materials are considered an article. Therefore, this is voluntary product information.

All components of the product are classified as non-hazardous according to the REACH Regulation and are not subject to labelling requirements (CLP, Regulation (EC) No. 1272 / 2008).

Kingspan rock mineral fibre insulation materials do not fall within the scope of Annex II, No. 5, of the Hazardous Substances Ordinance and Section 23 of the Annex to § 1 of the Chemicals Prohibition Ordinance.

Water hazard class: Not hazardous to water according to § 19 g, paragraph 5, WHG (according to number 1.2 a VwVwS).

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier. The products conform the RAL certification.

15.2 Chemical safety assessment

For this mixture a chemical safety assessment was not carried out.

Section 16: OTHER INFORMATION

Recommendations for the training of workers:

Persons involved in the trade in hazardous mixtures should be trained in the handling of hazardous chemical substances and mixtures.

Data sources:

The Safe Use Instruction Sheet has been prepared on the basis of the data contained in the safety data sheets of the raw materials used and the literature data.

The classification was made on the basis of the actual content of hazardous components using a calculation method.

Kingspan rock mineral fibre insulation are notable for being made from fibres that are not classified as carcinogenic. They have been certified by the EUCEB, which is an independent body that verifies the fibres meet specific solubility criteria according to European Directive 97/69/EG. This certification process involves regular inspections by independent institutes to ensure consistent compliance. The EUCEB certification is an important mark of safety and quality for these products, as indicated by the label on the packaging. This reflects the commitment to maintaining standards that protect health and safety.

Other symbols that might be printed on the packaging:


Ventilate working area if possible.


Waste should be disposed of according to local regulations.


Cover exposed skin. When working in unventilated area wear disposable face mask.


Clean area using vacuum equipment.


Headwear goggles when working overhead.


Rinse hands in cold water before washing them.