

SAFETY DATA SHEET

(Following Regulations (EC) No 1907/2006 & (EC) No 1272/2008)

SDS Number: 1202 Date of first issue: 01/02/2015 Date of last revision 06/02/2017

I - Identification of product

1.1 - IDENTIFICATION OF PRODUCT

Batiboard 250,

The above-mentioned product is a board combining Alkaline-earth silicate wools (AES wools), mineral wool, clay, glass fibres, expanded perlite and binders.

1.2 - USE OF PRODUCT

This product is a fire insulation board used for fire doors and partitions.

1.3 - IDENTIFICATION OF COMPANY

Fr. SITEK INSULATION S.A.S.U

Route de Lauterbourg CS 90148 67163 Wissembourg Cedex – France

Tel.: +33 (0)3 88 54 87 34 Fax: +33 (0)3 88 54 87 39

www.sitekinsulation.com info@sitekinsulation.com

1.4 EMERGENCY INFORMATION

Tel.: +33 (0)3 88 54 87 34

Language: English

Opening hours: Only available during office hours

2 - Hazard Identification

2.1 - CLASSIFICATION OF THE SUBSTANCE/ MIXTURE

2.1.1 CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008

Not classified as hazardous according to Classification, Labelling and Packaging regulations (CLP) 1272/2008 EEC

2.1.2 CLASSIFICATION ACCORDING TO DIRECTIVE 1999/45/EC

Not classified as hazardous according to EC directive 67/548/EEC

2.2 - LABELLING ELEMENTS

Not applicable

2.3 - OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION

Mild mechanical irritation to skin, eyes and upper respiratory system may result from exposure.

These effects are usually temporary.

CHRONIC EFFECTS FOR CRYSTALLINE SILICA

These products may contain minimal amounts of crystalline silica. Prolonged/repeated inhalation of respirable crystalline silica dust may cause delayed lung injury (silicosis).



3 - Composition / Information On Ingredients

3.2 MIXTURE

These products are boards made of AES wool bound with organic and inorganic materials.

COMPOSITION

COMPONENT	%	CAS Number	REACH Registration Number	Hazard Classification according to CLP
Alkaline-earth silicate wools	5-20	436083-99-7	01-2119457644-32	Not classified as hazardous
Mineral wool	40-60	65997-17-3	Not yet available	Not classified as hazardous
Starch	2-5	9005-25-8	Not yet available	Not classified as hazardous
Natural Clay	20-35	Not Applicable	Not yet available	Not classified as hazardous
Expanded Perlite	5-10	93763-70-3	Not yet available	Not classified as hazardous
Amorphous Silica	0.5-1.5	7631-86-9	01-2119379499-16	Not classified as hazardous

Composition:

None of the components are radioactive under the terms of European Directive Euratom 96/29.

4 - First-Aid measures

4.1 - DESCRIPTION OF FIRST AID MEASURES

SKIN

In case of skin irritation rinse affected areas with water and wash gently. Do not rub or scratch exposed skin.

EYES

In case of eye contact flush abundantly with water; have eye bath available. Do not rub eyes. Seek medical attention is irritation persists.

NOSE AND THROAT

If these become irritated move to a dust free area, drink water and blow nose. Seek medical attention if irritation persists.

FIRST AID ADDITIONAL INFORMATION

If symptoms persist, seek medical advice.

4.2 - MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

No symptoms or effects expected either acute or delayed.

4.3 - INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No special treatment required, if exposure occurs wash exposed areas to avoid irritation.

5 - Fire-fighting measures

5.1 - EXTINGUISHING MEDIA

Use extinguishing agent suitable for surrounding combustible materials.

5.2 - SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

This material is classified as a fire retardant.

5.3 - ADVICE FOR FIREFIGHTERS

Packaging and surrounding materials may be combustible.

^{*} CAS definition: Alkaline earth silicate (AES) consisting of silica (50-82 wt%), calcia and magnesia (18-43 wt%), alumina, titania and zirconia (less than 6 wt%), and trace oxides.



6 - Accidental Release Measures

6.1 - PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Where abnormally high dust concentrations occur, provide the workers with appropriate protective equipment as detailed in section 8. Restore the situation to normal as quickly as possible.

6.2 - ENVIRONMENTAL PRECAUTIONS

Prevent further dust dispersion for example by damping the materials.

Do not flush spillage to drain and prevent from entering natural watercourses.

Check for local regulations, which may apply.

6.3 - METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

Pick up large pieces and use a vacuum cleaner.

If brushes are used, ensure that the area is wetted down first.

Do not use compressed air for clean up.

Do not allow to become windblown.

6.4 - REFERENCE TO OTHER SECTIONS

For further information, please refer to sections 7 and 8

7 - Handling and storage

7.1 - PRECAUTIONS FOR SAFE HANDLING

Handling can be a source of dust emission and therefore the processes should be designed to limit the amount of handling. Whenever possible, handling should be carried out under controlled conditions (i.e., using dust exhaust system).

Regular good housekeeping will minimise secondary dust dispersal.

7.2 - CONDITIONS FOR SAFE STORAGE

Store in original packaging in a dry area.

Always use sealed and clearly labelled containers.

Avoid damaging containers.

Reduce dust emission during unpacking.

7.3 - SPECIFIC END USE

Please refer to your local Sitek Insulation supplier.



8 - Risk Management Measures / Exposures Controls / Personal Protection

8.1 - CONTROL PARAMETERS

Industrial hygiene standards and occupational exposure limits vary between countries and local jurisdictions. Check which exposure levels apply to your facility and comply with local regulations. If no regulatory dust or other standards apply, a qualified industrial hygienist can assist with a specific workplace evaluation including recommendations for respiratory protection. Examples of national OELs (November 2014) are given in the table below.

COUNTRY	Total Dust (mg/m³)	Resp Dust (mg/m³)	MMMF (fibre/ml)	SOURCE
Austria	10	6	1	Grenzwerteverordnung
Belgium	10	3	1	Valeurs limites d'exposition professionnelle – VLEP/ Grenswaarden voor beroepsmatige blootstelling – GWBB
Denmark	10	5	1	Grænseværdier for stoffer og materialer
Finland	No Limit	No Limit	1	Finnish Ministry of Social Affairs and Health
France	10	5	1	Institut National de Recherche et de Sécurité ED984
Germany	10	3	1	TRGS 900
Hungary	No Limit	No Limit	1	EüM-SZCSM rendelet
Ireland	10	4	1	HAS – Ireland
Italy	10	3	1	Uses EU values
Luxembourg	10	6	1	Agents Chimiques, Cancérigènes Ou Mutagènes Au Travail
Netherlands	10	5	1	SER
Norway	10	5	0.5	Veiledning om administrative normer for forurensning i arbeidsatmosfære
Poland	No Limit	No Limit	2	Dziennik Ustaw 2010
Spain	10	3	1	INSHT
Sweden	10	5	1	AFS 2005:17
Switzerland	10	6	1	SUVA - Valeurs limites d'exposition aux postes de travail
UK	10	4	2	EH40/2005

Information on monitoring procedures

United Kingdom

MDHS 59 specific for MMVF: "Man-made mineral fibre - Airborne number concentration by phase-contrast light microscopy" and MDHS 14/4 "General methods for sampling and gravimetric analysis of respirable and inhalable dust"

NIOSH

NIOSH 0500 "Particulates not otherwise regulate, total"

NIOSH 0600 "Particulates not otherwise regulate, respirable"

NIOSH 7400 "Asbestos and other fibres by PCM"

8.2 - EXPOSURE CONTROLS

8.2.1 APPROPRIATE ENGINEERING CONTROLS

Review your applications in order to identify potential sources of dust exposure.

Local exhaust ventilation, which collects dust at source, can be used. For example down draft tables, emission controlling tools and materials handling equipment.

Keep the workplace clean. Use a vacuum cleaner fitted with a HEPA filter. Avoid brushing and compressed air.

If necessary, consult an industrial hygienist to design workplace controls and practices.

The use of products specially tailored to your application(s) will help to control dust. Some products can be delivered ready for use to avoid further cutting or machining. Some could be pre-treated or packaged to minimise or avoid dust release during handling.

Consult your supplier for further details



8.2.2 - PERSONAL PROTECTIVE EQUIPMENT

Skin protection:

Wear gloves and work clothes, which are loose fitting at the neck and wrists. Soiled clothes should be cleaned to remove excess fibres before being taken off (e.g. use vacuum cleaner, not compressed air). Wash work clothes seperately from other clothing.

Eye protection:

As necessary wear goggles or safety glasses with side shields.

Respiratory protection:

SOLUBILITY(IES)

For dust concentrations below the exposure limit value, RPE is not required but FFP2 respirators may be used on a voluntary basis.

For short-term operations where excursions are less than ten times the limit value use FFP2 respirators.

In case of higher concentrations or where the concentration is not known, please seek advice from your company and/or local Sitek Insulation supplier.

Information and training of workers

Workers should be trained on good working practices and informed on applicable local regulations.

8.2.3 - ENVIRONMENTAL EXPOSURE CONTROLS

Refer to local, national or European applicable environmental standards for release to air water and soil. For waste, refer to section 13

9 - Physical and chemical properties

9.1 - INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Brown to light brown board

ODOUR Slight

ODOUR THRESHOLD Not Applicable рΗ Not Applicable **MELTING POINT/FREEZING POINT** > 1400 °C INITIAL BOILING POINT AND BOILING POINT RANGE Not Applicable **FLASH POINT** Not Applicable **EVAPORATION RATE** Not Applicable FLAMMABILITY (SOLID, GAS) Not Applicable UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS Not Applicable **VAPOUR PRESSURE** Not Applicable **VAPOUR DENSITY** Not Applicable **RELATIVE DENSITY** ≥ 250 kg/m³

PARTITION CO-EFFICIENT: N-OCTANOL/WATER

Not Applicable

Not Applicable

DECOMPOSITION TEMPERATURE

Not Applicable

VISCOSITY

Not Applicable

EXPLOSIVE PROPERTIES

Not Applicable

OXIDISING PROPERTIES

Not Applicable

FIBRES CONTAINED IN THE PRODUCT Length Weighted Geometric Mean Diameter >1.5 µm

Slight



10 - Stability and Reactivity

10.1 - REACTIVITY

The material is stable and non reactive.

10.2 - CHEMICAL STABILITY

The product is inorganic, stable and inert

10.3 - POSSIBILITY OF HAZARDOUS REACTIONS

None

10.4 - CONDITIONS TO AVOID

Please refer to handling and storage advice in Section 7

10.5 - INCOMPATIBLE MATERIALS

None

10.6 - HAZARDOUS DECOMPOSITION PRODUCTS

Upon heating above 900°C for sustained periods, this amorphous material begins to transform to mixtures of crystalline phases. For further information please refer to Section 16.

II - Toxicological information

TOXICOKINETICS, METABOLISM AND DISTRIBUTION

11.1.1 BASIC TOXICOKINETICS

Exposure is predominantly by inhalation or ingestion. Man made vitreous fibres of a similar size to AES have not been shown to migrate from the lung and/or gut and do not become located in other organs of the body

AES fibres contained in the products listed in the title have been designed to be rapidly cleared from lung tissue. This low biopersistence has been confirmed in many studies on AES using EU protocol ECB/TM/27(rev 7). When inhaled, even at very high doses, they do not accumulate to any level capable of producing a serious adverse biological effect.

11.1.2 Human Toxicological data

RESPIRATORY TOXICITY FOR MINERAL WOOLS

Epidemiological studies did not show any health effects related to fibres among Mineral Wool manufacturing workers. The excess of lung cancers reported in 1982 have been the subject of additional investigations and the examination of the confounding factors showed that the excess were not attributed to fibres. Smoking has been identified as the most important of these confounding factors.

11.1 - INFORMATION ON TOXICOLOGICAL EFFECTS

EXPERIMENTAL STUDIES FOR AES WOOL

In lifetime chronic studies there was no exposure-related effect more than would be seen with any "inert" dust. Subchronic studies at the highest doses achievable produced at worst a transient mild inflammatory response. Fibres with the same ability to persist in tissue do not produce tumours when injected into the peritoneal cavity of rats.

Experimental Studies for Mineral Wools

Animal inhalation studies on mineral wools showed neither pulmonary fibrosis nor lung cancer nor mesothelioma. Intratracheal and intraperitoneal injection studies did not show any disease except those involving selected fine glass fibres for special uses or experimental rock wools.

IRRITANT PROPERTIES

Negative results have been obtained in animal studies (EU method B 4) for skin irritation. Inhalation exposures using the nose only route produce simultaneous heavy exposures to the eyes, but no reports of excess eye irritation exist. Animals exposed by inhalation similarly show no evidence of respiratory tract irritation.

Human data confirms that only mechanical irritation, resulting in itching, occurs in humans, Screening at manufacturers' plants in the UK has failed to show any human cases of skin conditions related to fibre exposure.

Continuous glass filament, like some natural fibres, can produce a mild irritation resulting in itching or rarely, in some sensitive individuals, in a slight reddening. Unlike other irritant reactions this is not the result of allergy or chemical skin damage but is caused by mechanical effects.



12 - Ecological information

12.1 - TOXICITY

These products are inert materials that remain stable overtime.

No adverse effects of this material on the environment are anticipated.

12.2 - PERSISTENCE AND DEGRADABILITY

Not established

12.3 - BIOACCUMULATIVE POTENTIAL

Not established

12.4 - MOBILITY IN SOIL

No information available

12.5 - RESULTS OF PBT AND VPVB ASSESSMENT

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulative (vPvB).

12.6 - OTHER ADVERSE EFFECTS

No additional information available

13 - Disposal Considerations

13.1 - WASTE TREATMENT METHODS

Waste from these materials may be generally disposed off at a landfill, which has been licensed for this purpose. Please refer to the European list (Decision N° 2000/532/CE as modified) to identify your appropriate waste number, and insure national and/or regional regulations are complied with.

Unless wetted, such a waste is normally dusty and so should be properly sealed in containers for disposal. At some authorised disposal sites, dusty waste may be treated differently in order to ensure they are dealt with promptly to avoid them being windblown. Check for any national and/or regional regulations, which may apply.

When disposing of waste and assigning European Waste Code (EWC) any possible contamination during use will need to be considered and expert guidance sought as necessary.

14 - Transport information

14.1. UN 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

Not Applicable

14.6. SPECIAL PRECAUTIONS FOR USER

Not Applicable

14.7. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 AND THE IBC CODE

Not Applicable



15 - Regulatory information

15.1 - SAFETY HEALTH AND ENVIRONMENT REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCES OR MIXTURES

EU regulations:

- Council Directive 67/548/EEC "on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances as modified and adapted to the technical progress" (OJEC L 196 of 16 August 1967, p.1 and its modifications and adaptations to technical progress).
- Council Directive 1999/45/EC of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations (OJ L 200 of 30.7.1999)
- Regulation (EC) No 1907/2006 dated 18th December 2006 on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EC) No 1272/2008 dated 20th January 2009 on classification, labelling and packaging of substances and mixtures (OJ L 353)
- Commission Directive 97/69/EC of 5 December 1997 adapting to technical progress for the 23rd time Council Directive 67/548/EEC (OJEC of 13 December 1997, L 343).
- Commission regulation (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.
- The 1st Adaptation to Technical Progress (ATP) to Regulation (EC) No 1272/2008 enters into force on 25 September 2009. It transfers the 30th and 31st ATPs of Directive 67/548/EEC to the Regulation (EC) No 1272/2008.

PROTECTION OF WORKERS

Shall be in accordance with several European Directives as amended and their implementations by the Member States:

- a) Council Directive 89/391/EEC dated 12 June 1989 "on the introduction of measures to encourage improvements in the safety and health of workers at work" (OJEC (Official Journal of the European Community) L 183 of 29 June 1989, p.1).
- b) Council Directive 98/24/EC dated 7 April 1998 "on the protection of workers from the risks related to chemical agents at work" (OJEC L 131 of 5 May 1998, p.11).

OTHER POSSIBLE REGULATIONS

Member States are in charge of implementing European Directives into their own national regulation within a period of time normally given in the Directive. Member States may impose more stringent requirements. Please always refer to any national regulation.

15.2 - CHEMICAL SAFETY ASSESSMENT

A Chemical Safety Assessment has been carried out for AES and CSR can be provided on request.



16 - Other Information

USEFUL REFERENCES

(the directives which are cited must be considered in their amended version)

- Council Directive 89/391/EEC dated 12 June 1989 "on the introduction of measures to encourage improvements in the safety and health of workers at work" (OJEC L 183 of 29 June 1989, p.1).
- Regulation (EC) No 1907/2006 dated 18th December 2006 on registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EC) No 1272/2008 dated 20th January 2009 on classification, labelling and packaging of substances and mixtures (OJ L 353)
- Commission Directive 97/69/EC of 5 December 1997 adapting to technical progress for the 23rd time Council Directive 67/548/EEC (OJEC of 13 December 1997, L 343).
- Council Directive 98/24/EC of 7 April 1998 "on the protection of the health and safety of workers from the risks related to chemical agents at work" (OJEC L 131 of 5 May 1998, p11).

PRECAUTIONARY MEASURES

Information on after service heated fibres

In almost all applications high temperature insulating wools products (HTIW) are used as an insulating material helping keeping up temperature at 900°C or more in a closed space. As only a thin layer of the insulation hot face side is exposed to high temperature, respirable dust generated during removal operations does not contain detectable levels of crystalline silica.

In applications where the material is heat socked, duration of heat exposure is normally short and a significant devitrification allowing CS to build up does not occur. This is the case for waste mould casting for instance.

Toxicological evaluation of the effect of the presence of CS in artificially heated HTIW material has not shown any increased toxicity in vitro. The results from different combinations of factors like increased brittleness of fibres, or micro crystals embedded in the glass structure of the fibre and therefore not biologically available may explain the lack of toxicological effects.

IARC evaluation as provided in Monograph 68 is not relevant as CS is not biologically available in after service HTIW and respirable dust generated during removal operations does not contain detectable levels of crystalline silica. http://www.iarc.fr/en/publications/pdfs-online/index.php

High concentrations of fibres and other dusts may be generated when after-service products are mechanically disturbed during operations such as wrecking. Therefore ECFIA recommends:

- a) control measures are taken to reduce dust emissions; and
- b) all personnel directly involved wear an appropriate respirator to minimise exposure and comply with local regulatory limits.

CARE PROGRAM

The trade association representing the European high temperature insulation wool industry (ECFIA) has undertaken an extensive hygiene programme for High Temperature Insulation Wool (HTIW). The objectives are twofold: (i) to monitor workplace dust concentrations at both manufacturers' and customers' premises, and (ii) to document manufacturing and use of HTIW products from an industrial hygiene perspective in order to establish appropriate recommendations to reduce exposures. The initial results of the programme have been published. If you wish to participate in the CARE programme, contact ECFIA or your Sitek Insulation supplier.

WEBSITE

For more information connect to:

Sitek Insulation's website: (http://www.sitekinsulation.com/)

Or ECFIA's website: (http://www.ecfia.eu)

REVISION SUMMARY

Amendments to sections 3, 4, 5, 6, 8, 9, 12, 14, 15 and 16 to comply with new guidelines.

TECHNICAL DATA SHEETS

For more information on individual products please see the relevant technical data sheet available from http://www.sitekinsulation.com/downloads/datasheets.

OTHER INFORMATION

NOTICE:

The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However safe as provided by law, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorisation given or implied to practice any patented invention without a licence. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product (however, this shall not act to restrict the vendor's potential liability for negligence or under statute).