

SAFETY DATA SHEET

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

SDS Number: 1206 Date of first issue: 14 November 2013 Date of last revision: 21 February 2022

1 - Identification of product

1.1 - Identification of Product

Tradenames: Batiboard ECO,

The above-mentioned products are expanded perlite thermal insulation boards.

1.2 - Use of Product

This product is used as a flooring insulation board.

1.3 - Identification of Company

U.K.

| THERMAL CERAMICS LIMITED |
|-----------------------------|
| Tebay Road, Bromborough |
| Wirral, Merseyside CH62 3PH |
| Tel. : +44 (0) 151 334 4030 |
| Fax : +44 (0) 151 334 1684 |

Website

www.morganthermalceramics.com sds.tc@morganplc.com

1.4 - Emergency information

Tel: + 44 (0) 7931 963 973 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

2.2 - Labelling Elements

Not applicable

2.3 - Other hazards which do not result in classification

3 - Composition / Information On Ingredients

3.2 Mixture

These products in the form of board combine insulation with resistance to fire, mechanical properties, compressive strength and dimensional stability.

| COMPONENT | % by weight | CAS No. | REACH Registration Number | Hazard Classification according to CLP |
|--------------------|----------------|------------|---------------------------------|---|
| Expanded perlite | 50-70 | 93763-70-3 | Not yet available | Not classified as hazardous |
| Cellulose fibre 20 | | 65996-61-4 | Not yet available | Not classified as hazardous |

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.

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 required

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.

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 Morgan Thermal Ceramics' 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/m ³) | Resp Dust (mg/m ³) | 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 |
| Germany | 10 | 1.25 | No Limit | 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. 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 pretreated or packaged to minimise or avoid dust release during handling. Consult your supplier for further details

8.2.2 - Personal Protective Equipment

Skin protection:

Use of gloves and work clothes is recommended. Soiled clothes should be cleaned before being taken off (e.g. use vacuum cleaning, not compressed air).

Eye protection:

As necessary wear goggles or safety glasses with side shields.

Respiratory protection:

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 Thermal Ceramics' 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 section13

9 - Physical and chemical properties

| Information on basis abusical and chamical avanation |
|---|
| Information on basic physical and chemical properties State |
| Colour |
| Odour |
| Odour threshold |
| pH |
| • |
| Melting point/freezing point Initial boiling point and boiling point range |
| Flash point |
| Evaporation rate |
| • |
| Flammability (solid, gas) |
| Upper/lower flammability or explosive limits |
| Vapour pressure |
| Vapour density |
| Relative density |
| Solubility(ies) |
| Partition co-efficient: n-octanol/water |
| Auto-ignition temperature |
| Decomposition temperature |
| Viscosity |
| Particle Characteristics |
| Explosive properties |
| Oxidising properties |
| 10 - Stability and Reactivity |
| |

Not applicable Slight Not Applicable Not applicable > 1300°C Not applicable 130 kg/m³ Slight Not applicable Not applicable Not Applicable Not Applicable Not applicable Not applicable Not applicable

Not applicable Light brown board

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

None

11 - Toxicological information

Toxicokinetics, metabolism and distribution

11.1.1 BASIC TOXICOKINETICS

Exposure is predominantly by inhalation or ingestion, no chronic respiratory health effects are associated with any component in this mixture. Available toxicological information is as follows;

11.1.2 HUMAN TOXICOLOGICAL DATA No human data available

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

ACUTE TOXICITY Lethal dose 50 % (LD50) / lethal concentration 50% (LC50): N.A.

Prolonged or repeated contact with skin or mucous membranes may cause irritation symptoms including reddening and dermatitis.

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 - Endocrine Disrupting Properties

No additional information available

12.7 - Other adverse effects

13 - Disposal Considerations

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.

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:

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)

- Annex of Regulation (EU) 2015/830

- 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.

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

16 - Other Information

(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) - 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).

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

a) control measures are taken to reduce dust emissions;

b) all personnel directly involved wear an appropriate respirator to minimise exposure; and c) Compliance with local regulatory limits.

For more information connect to:

The Morgan Thermal Ceramics' website: (http://www.morganthermalceramics.com/) Or ECFIA's website: (http://www.ecfia.eu)

Revision Summarv

Update to Section 8

Technical data sheets

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

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).