

SAFETY DATA SHEET

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

SDS Number: E145 Date of first issue: 30 January 2017 Date of last revision: 21 February 2022

1 - Identification of product

1.1 - Identification of Product

Tradenames: UHT Composition B, UHT Composition D,

The above-mentioned product contains mineral wool.

1.2 - Use of Product

Application as thermal insulation, heat shields, heat containment, gaskets and expansion joints in industrial furnaces, ovens, kilns, boilers and other process. equipment and in the aerospace, automotive and appliance industries, and as passive fire protection systems and fire stops. (Please refer to specific technical data sheet for more information)

1.3 - Identification of Company

IDENTIFICATION OF THE MANUFACTURER/SUPPLIER

Morgan Advanced Materials Thermal Ceramics 30-36 Birralee Road, Regency Park, SA 5010, Australia Telephone: 1800 467 858 Fax: 1800 467 850

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

1.4 - Emergency information

EMERGENCY CONTACT NUMBER

Tel 1: +91 (4172) 244 313 extn no. 215 or 201

Language: English

Opening hours: Only available during office hours

2 - Hazard Identification

2.1 - Classification of the substance/ mixture

2.1 CLASSIFICATION OF THE SUBSTANCE/MIXTURE

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

Mineral wools (glass, rock and slag wool) included in these products have been classified under Regulation no. 1272/2008 as a category 2 carcinogen ("substance which cause concern for man owing to possible carcinogen effects") due to the absence of toxicological data allowing to exonerate these fibres under note Q of the Directive.

2.2 - Labelling Elements

Classification: Carcinogen Category 2. Hazard pictogram: GHS08



Signal Word: Warning. Hazard assessment: H351i: Suspected of causing cancer by inhalation.

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

3 - Composition / Information On Ingredients

These products in the form of bulk, blanket (pre-sized or not), strip, die-cut and modules, bloc, log (encapsulated or not), are made of AES wool (synthetic fibres, alk. earth silicate).

COMPONENT	% by weight	CAS No.	REACH Registration Number	Hazard Classification according to CLP
Machine Made Mineral Fibres *	100	N/A	not assigned	Cat. 2 carcinogen

Man-made vitreous silicate fibres of random orientation with alkaline oxide and alkali earth oxides content greater than or equal to 18% by weight

4 - First-Aid measures

Skin

Handling of this material may generate mild mechanical temporary skin irritation. If this occurs, rinse affected areas with water and wash gently. Do not rub or scratch exposed skin.

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

Non-combustible products,

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 exposure limits applying (in November 2014) in different countries are given below:

Country	MMVF	Source	
Austria	1 f/ml	Grenzwerteverordnung	
Belgium	10 mg/m3	Valeurs limites d'exposition professionnelle – VLEP/ Grenswaarden voor beroepsmatige blootstelling – GWBB	
Czech Republic	1 f/ml		
Denmark	1 f/ml	Grænseværdier for stoffer og materialer	
Finland	1 f/ml	Finnish Ministry of Social Affairs and Health	
France	1 f/ml	INRS	
Germany*	1.25 mg/m ³	TRGS900	
Hungary	1 f/ml	EüM-SZCSM rendelet	
Ireland	1 f/ml	HAS - Eire	
Italy	1 f/ml		
Luxembourg	1 f/ml	Règlement grand-ducal du 30 juillet 2002	
Netherlands	1 f/ml	Social and Economic Council of the Netherlands	
Norway	0.5 f/ml	Veiledning om administrative normer for forurensning i arbeidsatmosfære	
Poland	2 f/ml	Dziennik Ustaw 2010	
Spain		INSHT	
Sweden	1 f/ml	Hygieniska gränsvärden och åtgärder mot luftföroreningar	
Switzerland	1 f/ml	SUVA	
UK	2 f/ml	EH40/2005	
GCC	1 f/ml	Abu Dhabi OSHAD	
South Africa	5mg/m ³	Regulation 1179 – Hazardous Chemical Substances 2007	

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

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

8.2.2 - Personal Protective Equipment

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 basic physical and chemical properties Not applicable State White Fibre Colour White Odour Not applicable **Odour threshold** Not applicable Not applicable рΗ Melting point/freezing point > 1200°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 Not applicable Vapour pressure Vapour density Not applicable Relative density 120 - 220 kg/m³ Solubility(ies) Not applicable Partition co-efficient: n-octanol/water Not applicable **Auto-ignition temperature** Not applicable **Decomposition temperature** Not applicable Viscosity Not applicable

Other safety information No further relevant information available.

 Particle Characteristics
 Not applicable

 Explosive properties
 Not applicable

 Oxidising properties
 Not applicable

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.

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

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.

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

13.1 - Disposal Considerations

14 - Transport information

14.1 - Transport information

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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 - Regulatory information

This SDS has been prepared in accordance with WHO GHS rev. 6 requirements. Where applicable, local regulations have been followed.

16 - Other Information

16.1 - ADDITIONAL INFORMATION AND PRECAUTIONS TO BE CONSIDERED UPON REMOVAL OF AFTER SERVICE MATERIAL

16.2 - uses advised against

16.3 - NOTE

This Safety Data Sheet was originally produced in English and has subsequently been translated in to other languages; whilst every effort has been made to make this an accurate translation, please be aware that technical terms do not always translate correctly. The English version should always be considered as the reference version.

16.4 - Further Information

FURTHER INFORMATION

Further information can be found on

http://www.morganthermalceramics.com/

http://www.ecfia.eu/

http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/workplace-exposure-standards-airborne-contaminants

16.5 - Technical Datasheets

16.6 - Revision Summary

Content checked and revision date updated

16.7 - NOTICE

The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, 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 authorization given or implied to practice any patented invention without a license. 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.