



SAFETY DATA SHEET

(EUROPEAN)

SDS NUMBER 050E Revision 4 According to (EC) No 1907/2006 and (EC) No 1272/2008 DATE OF ISSUE 30th April 2009 DATE OF LAST REVISION :2nd December 2010

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

IDENTIFICATION OF THE SUBSTANCE

TRADE NAMES: **Excelfrax 1000 Boards**
Excelfrax 1000 Panels
Excelfrax 1000 FLX Panels

DENOMINATION : Micro porous insulation

IDENTIFICATION OF THE MANUFACTURER AND SALES CONTACTS

GERMANY	UK	FRANCE
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SALES CONTACTS ONLY

SPAIN	ITALY
Unifrax Spain Cristobal Bordiu 20 Madrid 28003 Spain Tel: + 34 91 395 2279 Fax: + 34 91 395 2124	Unifrax Italia Srl Via Volonterio 19 Saronno (Va) 21047 Italy Tel: + 39 02 967 01 808 Fax: + 39 02 962 5721

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Language: English

Opening hours: Only available during office hours



2. HAZARDS IDENTIFICATION

As supplied would not present any hazard.

Mild mechanical irritation (itching) to skin, eyes and upper respiratory system may result from exposure to dust released when handling and machining these products. These effects are usually temporary.

3. COMPOSITION / INFORMATION OF INGREDIENTS

COMPONENT	CAS NUMBER	SYMBOL	R PHRASES
Glass wool	65997-17-3	None	NA
Silicon Carbide	409-21-2	NA	NA
Amorphous silica	7631-86-9	NA	NA
Calcium silicate	65997-15-1	NA	NA

COMPOSITION

Excelfrax 1000 products are based on advanced micro porous insulation technology

DESCRIPTION

Excelfrax 1000 product are available in the form of rigid boards (Excelfrax 1000 Boards), and rigid or flexible panels (Excelfrax 1000 Panel or Excelfrax 1000 FLX Panel). Panels consist of a micro porous core wrapped in a woven glass cloth

Use of the product

Application as thermal insulation at temperature up to 950°C, in various industrial process equipment including automotive and domestic appliance industries.

4. 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.

NOSE AND THROAT:

Move to a dust free area, drink water and blow nose.

5. FIRE-FIGHTING MEASURES

Non combustible products. Packaging and surrounding materials may be combustible. Use extinguishing agent suitable for surrounding combustible materials.



6. ACCIDENTAL RELEASE MEASURES

Where high dust concentrations occur, provide the workers with appropriate protective equipment as detailed in section 8.

Prevent further dust dispersion for example by damping the materials.

METHODS FOR CLEANING UP

Pick up large pieces and use a vacuum cleaner fitted with high efficiency filter (HEPA)

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

Do not use compressed air for clean-up.

Do not allow to be wind blown.

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

Check for local regulations, which may apply.

For wastes disposal refer to section 13

7. HANDLING AND STORAGE

HANDLING / TECHNIQUES TO REDUCE DUST EMISSIONS DURING HANDLING

HANDLING

Handling can be a source of dust emission.

The Process or processes should be designed to limit the amount of handling. Whenever possible, handling should be carried out under controlled conditions (i.e., use dust exhaust system).

Regular good housekeeping will minimise secondary dust dispersal.

STORAGE

Store in original packaging in dry area whilst awaiting use

Always use sealed and visibly labelled containers.

Avoid damaging containers.

Reduce dust emission during unpacking.

Emptied containers, which may contain debris, should be cleaned before disposal or recycling.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

HYGIENE STANDARDS AND CONTROL MEASURES

When handling and machining these products workplace exposure limits (WEL) must be observed.

Hygiene standards and occupational exposure limits may vary between countries and local jurisdictions. Check which exposures apply to your facility. 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 in January 2010 for respirable dust are given below:

Germany	3.0 mg/m ³	TRGS 900, Bunderarbeitsblatt 2005
France	5.0 mg/m ³	VLEP (Valeurs limite d'exposition professional)**
United Kingdom	4.0 mg/m ³	HSE EH40 Workplace Exposure Limit*

8-hr time weighted average concentrations of airborne respirable dust



*Amorphous silica – HSE EH40(Respirable fraction) has a WEL of 2.4 mg/m³

**Decree n° 2008-244 dated 7th March 2008

- Labor code - Obligations of the employer for the workplaces use

Article R4222-10

"In the places with specific pollution, the average concentration of total and alveolar dusts in the air inhaled by a worker, evaluated on a 8 hour period, cannot exceed respectively 10 and 5 mg/m³".

ENGINEERING CONTROLS

Review your application(s) 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 material handling equipment.

Keep the workplace clean. Use a vacuum cleaner fitted with an HEPA filter; avoid brushing and using compressed air.

PERSONAL PROTECTIVE EQUIPMENTS

SKIN PROTECTION

Wear industrial gloves and work clothes, when handling materials..

EYE PROTECTION

As necessary wear goggles or safety glass 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 your supplier.

INFORMATION AND TRAINING OF WORKERS

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

ENVIRONMENTAL EXPOSURE CONTROLS

Refer to local, national or European applicable environmental permitted standards for release to air, water and soil.

For waste, refer to section13

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid	Melting point	NA
Flammability	None	Density	220-330kg/m ³
Appearance	grey/white	Explosive properties	None
Oxidising properties	None	Odour	None
pH (1000g/l H ₂ O)	NA		



10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID N.A. **MATERIALS TO AVOID** N.A.
DECOMPOSITION PRODUCTS None

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Micro porous products are not expected to have significant acute toxicity. They can produce a mild mechanical irritation to skin, eyes and upper respiratory system.

The German Institute for Hygiene and Industrial Medicine at the University of Essen have found no toxic effects.

12. ECOLOGICAL INFORMATION

These products are inert materials, which remain stable overtime.
No adverse effects of this material on the environment are anticipated.

13. DISPOSAL CONSIDERATIONS

Waste from these products are classed as non hazardous and may generally be disposed of at landfill, which has been licensed for this purpose. Please refer to the European list (Decision no 2000/532/CE as modified) to identify your appropriate waste number, and insure national and or regional regulation are complied with. Taking into account any possible contamination during use, expert guidance should be sought.

Unless wetted, such a waste is normally dusty and so should be properly sealed in clearly labelled 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 wind blown. Check for national and/or regional regulations, which may apply

14. TRANSPORT INFORMATION

Not classified as dangerous goods under relevant international transport regulations (ADR, RID, IATA, IMDG Refer Section 16 "Definitions").

Ensure that dust is not wind blown during transportation.

15. REGULATORY INFORMATION

Directive 67/548/EEC

Regulatory status in the EU, comes from European Directive 67/548/EEC, on the classification, labelling and packaging of dangerous substances and preparations as modified by Directive 97/69/EEC and its implementations by the Member States.

As this product is considered an article it is not covered by Directive 67/548/EEC, and as such does not require labelling in accordance with the directive.



The fibre contained within this product is a glass wool with a diameter $>6\mu\text{m}$, belonging to the group of "man made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide ($\text{Na}_2\text{O} + \text{K}_2\text{O} + \text{CaO} + \text{MgO} + \text{BaO}$) content greater than 18% by weight". This material is exonerated from the aforementioned directive under nota R.

This applies for sales in the European Union

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 1997 " on the protection of workers from the risks related to chemical agents at work" (OJEC L 131 of 5 May 1998,p.11).

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 national regulations.

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)

Council Directive 67/548/EEC on the "approximation of the laws, regulations and administrative provision 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).

Commission Directive 97/69/EC of 5 December 1997 "adapting to technical progress for the 23rd time Council Directive 67/548/EEC ,(OJEC L 343 Official Journal of the European Communities, 13/12/97 , p.19).

Council Directive 98/24/EC of 7th April 1998 "on the protection of the health and safety of workers from risks related to chemical agents at work" (OJEC L131 of 5th May 1998, P.11)

DEFINITIONS

ADR – Transport by road, council directive 94/55/EC

IMDG – Regulations relating to transport by sea

RID – Transport by rail, Council Directive 96/49/EC

ICAO/IATA - Regulations relating to transport by air

NOTE

The directives and subsequent regulations detailed in this Material Safety Data Sheet are only applicable to the European Union (EU) Countries and not to countries outside of the EU.



NOTICE:

The information presented here in is based on data considered to be accurate as of the date of preparation of this Material 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 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.