

# SAFETY DATA SHEET



**ENVIROGRAF®**

HS038-03-2020

## Product Number: 38 Intumescent Material ES/MP

### **Description:**

ES/MP is a double coated fireproof cloth for adhering between panels in the manufacture of new fire doors.

*Under Regulation 1907/2006 REACH Safety Data Sheets are only required for hazardous substances and mixtures/preparations; Intumescent Systems Ltd is not therefore legally obliged to supply Safety Data Sheets for its articles. Despite this Intumescent Systems Ltd has decided to provide its customers with information regarding the safe use and handling of the products listed above by means of this Safety Data Sheet.*

This product comprises of the following materials and therefore is supported by Health & Safety Data Sheets:

- (Appendix 3) Glass Cloth
- (Appendix 15) LVFR
- (Appendix 35) Graphite Mix

\*The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the user's own assessment of workplace risk as required by other health and safety legislation.

**HEALTH & SAFETY INFORMATION SHEET**  
**APPENDIX 3**  
*WOVEN GLASS FABRIC*

Issue 3. 06 September 2018

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**1. IDENTIFICATION OF THE PREPARATION AND COMPANY**

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PRODUCT NAME: Woven Glass Fabric  
MANUFACTURER/SUPPLIER: Envirograf  
ADDRESS: Envirograf House, Barfrestone, Dover, Kent, CT15 7JG  
TELEPHONE/FAX/EMAIL: 01304 842555 01304 842666 sales@envirograf.com  
EMERGENCY PHONE NUMBER: 01304 842555 (Monday to Friday 8.30 – 5.30)

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**2. HAZARDS IDENTIFICATION**

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There are no major health hazards associated with the fabric; however exposure to glass fibres sometimes causes irritation of the skin and less frequently irritation of the eyes, nose or throat.

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**3. COMPOSITION / INFORMATION ON INGREDIENTS**

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**Chemical characterisation:** Fibrous glass (E-type, continuous filament) compositions consisting principally of oxides of silicon, aluminium, calcium, boron and magnesium, fused in an amorphous vitreous state

Glass fibre is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Fibrous glass, continuous filament	EC: 266/046-0	Not classified
	CAS: 65997/17-3	

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**4. FIRST-AID MEASURES**

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**Inhalation:** In case of inhalation of glass dust particles or fumes from thermal degradation move into fresh air, if irritation persists seek medical attention

**Skin Contact:** If irritation is a problem then rinse the affected areas with cool water, then wash gently with mild soap. If glass fibre becomes embedded in the skin then seek medical attention

**Eye Contact:** Flush eyes with clear water for at least 15 minutes, if irritation persists seek medical attention

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**5. FIRE-FIGHTING MEASURES**

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Glass fibre is inherently non-flammable

**Suitable extinguishing media:** Water, carbon dioxide, dry powder

**Protective equipment for Fire fighters:** In a sustained fire, self-contained breathing apparatus and protective clothing should be utilised

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**6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions:** None

**Environmental precautions:** None

**Method for cleaning up:** Dust pan and wet brush

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## 7. HANDLING AND STORAGE

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**Precautions for handling:** No special measures, for personal protection see section 8. Glass fibre has electrical isolation properties and so may give some static

**Precautions for storage:** Store below 25°C in a dry, well ventilated place

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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**Respiratory protection:** None required, if airborne glass fibre concentrations exceed the control limit, respiratory protection for nuisance dust should be provided.

**Eye protection:** Safety glasses with side shields should be worn.

**Hand/Skin protection:** Protective gloves, overalls buttoned to fit loosely at the neck and wrists and long trousers may reduce irritation in some operations. Barrier cream may provide further protection from irritation.

**Hygiene measures:** Wash hands before breaks and at the end of the day. Launder items of clothing contaminated with glass fibre dust separately.

**Control limits:** Airborne glass dust – TLV = 5mg/m<sup>3</sup>

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance:</b>	White woven fibres
<b>Colour:</b>	White
<b>Odour:</b>	None
<b>pH Value:</b>	Not applicable
<b>Melting point (softening):</b>	830° C
<b>Flash point:</b>	Not applicable
<b>Auto ignition temperature:</b>	Not applicable
<b>Explosive properties:</b>	Not applicable
<b>Specific gravity:</b>	2.6g/cm <sup>3</sup>
<b>Solubility:</b>	Insoluble in water. Glass fibre will disperse, to some extent in organic solvents like styrene, acetone etc.

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## 10. STABILITY AND REACTIVITY

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**Conditions to avoid:** Stable under recommended storage and handling conditions (see section 7)

**Material to avoid:** Not applicable

**Hazardous decomposition products:** Carbon dioxide, carbon monoxide, silicone dioxide

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## 11. TOXICOLOGICAL INFORMATION

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**Inhalation:** The products of thermal decomposition, including carbon dioxide and carbon monoxide may cause dizziness and headache after prolonged low level exposure. Pre-existing upper respiratory and lung disease may be aggravated.

**Skin contact:** No toxicological effect.

**Eye contact:** No toxicological effect.

This product is not manufactured using glass fibre with diameters that are classified as respirable (fibres with diameters less than 3.0 microns which are capable of travelling into the body to the trachea, bronchi etc) All of the fibres in this product have fibre diameters equal to or greater than 4.5 microns, and are therefore not physically capable of travelling beyond the nose and pharynx.

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## 12. ECOLOGICAL INFORMATION

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Glass fabrics are not readily biodegradable. No known harmful effects on the environment

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## 13. DISPOSAL CONSIDERATIONS

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**Waste from residues/unused products:** Dispose as solid, non-recyclable waste according to local regulations.  
**Contaminated packaging:** Empty containers should be transported/delivered using a registered waste carrier for local recycling where possible or waste disposal.

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## 14. TRANSPORT INFORMATION

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No special precautions or restriction involving transport are known.

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## 15. REGULATORY INFORMATION

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Symbols: None

Safety phrases: None

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## 16. OTHER INFORMATION

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History:

**Date of revision** 6<sup>th</sup> September 2018

**Reason for revision** General review

**Sections revised:** All sections revised

The information contained in the Health and Safety Data Sheet is provided in accordance with the requirements of the most recent REACH Regulations. The product should not be used for purposes other than those shown without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. This information contained in the safety data sheet is based on present knowledge and current EU legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

**HEALTH & SAFETY INFORMATION SHEET**  
**APPENDIX 15**  
*LVFR*

October 2018. ISSUE 3

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**1. IDENTIFICATION OF THE PREPARATION AND COMPANY**

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**PRODUCT NAME:** LVFR  
**MANUFACTURER/SUPPLIER:** Envirograf  
**ADDRESS:** Envirograf House, Barfrestone, Dover, Kent, CT15 7JG  
**TELEPHONE / FAX / EMAIL:** 01304 842555 01304 842666 sales@envirograf.com  
**EMERGENCY PHONE NUMBER:** 01304 842555 (Monday to Friday 8.30 – 5.30)

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**2. HAZARDS IDENTIFICATION**

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**HAZARD SYMBOL:** EUH208 May produce allergic reaction



**HEALTH EFFECTS:**

**SKIN:** May cause slight irritation on prolonged / repeated contact.

**EYES:** May cause some irritation.

**INHALATION:** No hazard under normal conditions of use.

**INGESTION:** Low toxicity.

**PHYSICAL/CHEMICAL EFFECTS:** Not applicable.

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**3. COMPOSITION / INFORMATION ON INGREDIENTS**

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**CHEMICAL CHARACTERIZATION:** Aqueous polymer coating for exterior surfaces.

Chemical Name	CAS No.	EC No.	%	Classification
2-Methylisothiazol-3(2H)-one	2682-20-4		<0.00006%	H330/H318/H411/H317
Pyrithione Zinc	13463-41-7		<0.00006%	H301/H330/H318/H400/H410
1,2-benzisothiazol-3(2H)-one	2634-33-5		<0.00006%	H330/H318/H400/H411/H302/H315/H317

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**4. FIRST AID MEASURES**

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**SKIN CONTACT:** Remove contaminated clothing and wash contaminated skin with soap and water.

**EYE CONTACT:** Wash immediately with water for 15 minutes. If irritation persists seek medical advice.

**INHALATION:** Remove the casualty to fresh air.

**INGESTION:** Rinse out mouth with water and if conscious drink plenty of water. Seek medical attention.

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**5. FIRE-FIGHTING MEASURES**

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**EXTINGUISHING MEDIA:** Foam, carbon dioxide, powder, and water spray.

**EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS:** None known

**SPECIAL EXPOSURE HAZARDS:** None known.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:** Chemical protection suit / gloves / boots and self-contained breathing apparatus.

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## 6. ACCIDENTAL RELEASE MEASURES

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**PERSONAL PRECAUTIONS:** Use personal protection equipment.

**ENVIRONMENTAL PRECAUTIONS:** Do not dispose of into surface water or sanitary sewer system.

**METHODS FOR CLEANING UP:** Scrape up excess and dispose of at an approved site.

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## 7. HANDLING AND STORAGE

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**HANDLING PRECAUTIONS:** Not applicable.

**STORAGE CONDITIONS:** Store in original closed containers between + 5°C and + 30°C in dry conditions. Avoid extremes of temperature.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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**CONTROL PARAMETERS:** Refer to current edition of HSE Guidance Note EH40 Occupational Exposure Limits (UK)

**ENGINEERING MEASURES:** Not applicable.

**PERSONAL PROTECTION EQUIPMENT:**

**RESPIRATORY PROTECTION:** Mask where appropriate.

**HAND PROTECTION:** Gloves.

**EYE PROTECTION:** Goggles.

**SKIN AND BODY PROTECTION:** Wearing of closed work clothing is recommended.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Colour</b>	White, Red or Yellow.
<b>Form</b>	Shear thinning paste.
<b>Odour</b>	Low odour.
<b>pH as supplied</b>	Approximately 6.5–8.0
<b>Boiling point/range</b>	Not determined.
<b>Melting point/range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not self-igniting.
<b>Auto ignition temperature</b>	Not applicable.
<b>Explosive properties</b>	Not applicable.
<b>Oxidizing properties</b>	Not applicable.
<b>Vapour pressure</b>	Not applicable.
<b>Specific Gravity</b>	1.26 to 1.30
<b>Solubility:</b>	
<b>Water solubility</b>	Miscible.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.

**Other data**

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## 10. STABILITY AND REACTIVITY

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**STABILITY:** Stable under normal conditions.

**CONDITIONS TO AVOID:** Avoid extremes of temperature especially frost and freezing conditions.

**MATERIALS TO AVOID:** None, under normal conditions of use.

**HAZARDOUS DECOMPOSITION PRODUCTS:** No decomposition if stored and applied as directed.

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## 11. TOXICOLOGICAL INFORMATION

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Not applicable

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## 12. ECOLOGICAL INFORMATION

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Not applicable

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## 13. DISPOSAL CONSIDERATIONS

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Dispose of in accordance with local regulations at approved sites.

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## 14. TRANSPORT INFORMATION

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<b>UK ROAD/RAIL</b>	Not applicable. None hazardous.
<b>IMDG</b>	Not applicable. None hazardous.
<b>ICAO</b>	Not applicable. None hazardous.
<b>ADR</b>	Not applicable. None hazardous.

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## 15. REGULATORY INFORMATION

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**Supply classification:**  
**Hazard symbol(s)** EUH208 May produce allergic reaction

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## 16. OTHER INFORMATION

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**Recommended use** Coating with fire retardant / intumescent properties.  
**Further information** Consult technical data sheet.

### History

<b>Date of printing</b>	06 March 2020
<b>Date of issue</b>	October 2018
<b>Version</b>	3
<b>Prepared by</b>	Intumescent Systems Limited

The information contained in the Health and Safety Data Sheet is provided in accordance with the requirements of the most recent REACH Regulations. The product should not be used for purposes other than those shown without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. This information contained in the safety data sheet is based on present knowledge and current EU legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications

The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the user's own assessment of workplace risk as required by other health and safety legislation. The information given in this safety data sheet is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

**HEALTH & SAFETY DATA SHEET**  
**APPENDIX 1**  
*GRAPHITE MIX INTUMESCENT MATERIAL*

Issue 3. July 2018

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## 1. IDENTIFICATION OF THE PREPARATION AND COMPANY

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<b>PRODUCT NAME:</b>	Graphite Mix Intumescent Material
<b>MANUFACTURER/SUPPLIER:</b>	Intumescent Systems Ltd
<b>ADDRESS:</b>	Envirograf House, Barfrestone, Dover, Kent, CT15 7JG
<b>TELEPHONE / FAX / EMAIL:</b>	01304 842555    01304 842666    sales@envirograf.com
<b>EMERGENCY PHONE NUMBER:</b>	01304 842555 (Monday to Friday 8.30 – 5.30)

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## 2. HAZARDS IDENTIFICATION

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### HAZARD STATEMENTS:

1. None for the non-woven products (manufactured articles) covered by this MSDS
2. None for dust and fibres released during handling

Cutting through the material and surface scuffing may release small amounts of airborne fibre, clay and carbon dust which are mechanically irritant to skin, eyes and upper respiratory system.

As with any dust, pre-existing upper respiratory symptoms and lung diseases may be aggravated.

Under the European chemicals Regulation 1907/2006 REACH this product is considered to be an article. These materials do not contain any substances of very high concern or substances intended to be released under normal foreseeable conditions of use.

Under Regulation 1907/2006 REACH Safety Data Sheets are only required for hazardous substances and mixtures/preparations; Intumescent Systems Ltd is not therefore legally obliged to supply Safety Data Sheets for its non-woven products.

Despite this Intumescent Systems Ltd has decided to provide its customers with information regarding the safe use and handling of the products listed above by means of this Material Safety Data Sheet

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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### COMPOSITION:

Substance	CAS / EC No	% by weight	Classification and labelling Regulation EC 1272/2008	Classification and labelling Directive 67/548/EEC
Mineral Wool*	287922-11-6	20 – 85	Not Classified	Not Classified
Exfoliating Graphite	7782-42-5/231-995-3	4.0 – 60	Not Classified	Not Classified
Polymeric Binder and Self Adhesive coating	N/A - polymer	5.0 - 30	Not Classified	Not Classified

\* Man-made vitreous silicate fibres of random orientation with alkaline oxide and alkali earth oxides (Na<sub>2</sub>O + K<sub>2</sub>O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the Note Q conditions for increased bio-solubility.

Mineral wool fibres satisfying the Note Q conditions for increased bio-solubility are not classified as carcinogenic according to Directive 97/69/EC and Regulation EC 1272/2008 (page332 of the JOCE L353 of 31 Dec 2008)

Self-adhesive products are supplied faced on one side with a Kraft release paper.

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## 4. FIRST AID MEASURES

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**SKIN:** Rinse affected areas with water and wash gently with soap. Do not use detergent.

**EYES:** Flush eyes with large quantities of water, Have eye bath readily available in areas where eye contact may occur. Seek medical attention if irritation continues.

**INGESTION:** Drink plenty of water. Seek medical advice.

**INHALATION:** Remove to fresh air, drink water and clear throat and blow nose to evacuate fibre/dust. Seek medical attention.



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## 5. FIRE FIGHTING MEASURES

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**SUITABLE EXTINGUISHING MEDIA:** Use extinguishing agent suitable for type of surrounding combustible materials. Do not inhale products of combustion.

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## 6. ACCIDENTAL RELEASE MEASURES

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Do not allow dust to be wind blown.

Unwanted product should be collected and stored in sealed bags.

Do not use compressed air to remove dust or fibres from equipment

Dust/fibre should be removed using a suitable vacuum cleaner with HEPA exhaust air filtration.

The collected deposits and used vacuum cleaner bags should be sealed into poly-bags before disposal.

If sweeping is required the area should be thoroughly damped down with water before sweeping commences to prevent dust and fibres becoming airborne during sweeping

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## 7. HANDLING AND STORAGE

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**HANDLING:** Keep dust generation to a minimum.

**STORAGE:** Store dry and cool. Keep in original wrapping until required for use.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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**APPLICABLE OCCUPATIONAL EXPOSURE LIMITS:** from HSE EH40/2005 – second edition 2011

**MACHINE MADE MINERAL FIBRE:**

(excluding Refractory Ceramic Fibre and Special Purpose Fibres): 2.0 fibres/ml & 5 mg/m; (8 hr TWA)

**FINE CARBON DUST:** 3.5 mg/m; (8 hr TWA) and 7 mg/m; (15 minute reference))

**RESPIRATORY PROTECTION:** Use local ventilation systems where available. If workplace exposures exceed the limits wear disposable dust respirator to EN149:2001 FFP2 minimum

**HAND PROTECTION:** Use of disposable nitrile rubber gloves is recommended.

**EYE PROTECTION:** Wear goggles or safety glasses with side shields. Do not wear contact lenses.

**SKIN PROTECTION:** Wear overalls that are loose fitting at the neck and wrists.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**APPEARANCE:** Flexible Dark Grey or Black fibrous mat

**DENSITY:** 200 - 500 kg/m<sup>3</sup>

**EXPANSION:** Rapid volumetric expansion occurs when product is heated above 200°C

**FLAMMABILITY:** Material will sustain combustion for a short period until organic binder (and SAB coating) is burnt out or resulting expansion self-extinguishes.

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## 10. STABILITY AND REACTIVITY

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**STABILITY / CONDITIONS TO AVOID:** Stable.

**MATERIALS TO AVOID:** Strong oxidizing agents, strong alkalis and hydrofluoric acid.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Decomposition of the polymeric binder will occur at temperature above 200°C releasing smoke, H<sub>2</sub>O, CO, CO<sub>2</sub> and hydrocarbons. When heated above 250°C the graphite will expand resulting in a thermally insulation char.

**HAZARDOUS POLYMERISATION:** Will not occur

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## 11. TOXICOLOGICAL INFORMATION

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**MINERAL WOOL FIBRE:**

Coarse fibres: in common with other man-made mineral fibres the vitreous silicate fibres in this product are mechanical irritants which may result in temporary irritation of the throat, eyes or skin.

Respirable fibres: the mineral wool fibres in these products contain fibres which are less than 3.0µm diameter and greater than 5.0µm long and which are classified as respirable.

Animal studies: short term inhalation studies of rats exposed to high levels of stone wool fibres have shown that the long fibres are biodegradable and quickly disappear from the lungs.  
Human Epidemiological studies: large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have been conducted with traditional mineral wools. The studies found no significant evidence of non-malignant lung disease (e.g. fibrosis) The studies did not establish a causal relationship between exposure to traditional mineral wools and malignant diseases (lung cancer or mesothelioma). The particular mineral wool fibre used in the products covered by this SDS is based on a new formulation with increased bio-solubility giving even more rapid clearance of fibres from the lungs compared with traditional mineral wools.

**GRAPHITE:**

Powdered graphite is non-toxic. High levels of airborne graphite dust may be a mechanical eye irritant. Skin contact with graphite dust may cause temporary irritation due to mechanical effects; repeated prolonged exposures may lead to dermatitis. Airborne graphite dust is an upper respiratory irritant; exposures may aggravate pre-existing upper respiratory and lung diseases. Cases of pneumoconiosis, pulmonary fibrosis and emphysema have been reported in workers following prolonged exposures to high levels of airborne graphite dust.

**POLYMERIC BINDER AND SELF ADHESIVE COATING:**

The Polymeric binder and SAB coating are considered to be non-hazardous.

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## 12. ECOLOGICAL INFORMATION

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This product will remain stable over time with the inorganic components remaining inert.

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## 13. DISPOSAL CONSIDERATIONS

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Waste is not classified as a hazardous waste and may be disposed of at a normal licensed industrial waste site. Local regulations should be considered. Waste should be bagged or suitably contained for disposal to prevent any dusts being wind blown during disposal.

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## 14. TRANSPORT INFORMATION

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Not regulated for Transport. Ensure that dust is not windblown during transportation.  
Ensure that dust or fibres are not wind-blown during transportation.

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## 15. REGULATORY INFORMATION

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Product Hazard Classification according to Directive 67/548 EEC:  
Not classified

Product Hazard Classification according to Regulation CE1272/2008:  
Article - not classified

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## 16. OTHER INFORMATION

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Notes: revised and reissued with minor changes 3<sup>rd</sup> December 2016

Further information regarding working with man made mineral fibres and measurement techniques may be obtained by referring to Guidance Note EH46 1990 and NDHS59 1998 published by the UK, Health & Safety Executive.

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