

# SAFETY DATA SHEET



**ENVIROGRAF®**

HS110-FTP Flue Pipe Protection-11-2019

Product Number: 110

## Firoblok® Intumescent Sleeves for Services Fire & Thermal Protection IWS T, 110FLUE, CBC

### Introduction:

A foiled intumescent sleeve designed to give fire, thermal and acoustic protection to pipes, cables, flue pipes and cable baskets. Firoblok® sleeves are designed to protect cables and metal/plastic pipes and ventilation trunking passing through fire-rated ceiling, floors or walls made from block, brick or concrete and hollow plasterboard floors and walls. They are flexible, allowing contraction and expansion of water pipes and give protection from corrosion caused by close contact with cement, cement blocks, plaster and other corrosive building materials.

*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 1) Intumescent material
- (Appendix 2) Fire Proof Sponge
- (Appendix 43) Foiled Glass Cloth
- (Appendix 87) PU Cloth

\*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 DATA SHEET**  
**APPENDIX 1**  
**MULTIGRAF 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>	Multigraf Intumescent Material
<b>MANUFACTURER/SUPPLIER:</b>	Intumescent Systems Ltd
<b>ADDRESS:</b>	Envirograf House, Barrestone, 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 Grey fibrous mat with black speckle

**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 6<sup>th</sup> September 2018

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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**HEALTH & SAFETY INFORMATION SHEET**  
**APPENDIX 2**  
**FIRE PROOF SPONGE**

Issue 3, September 2018

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

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<b>PRODUCT NAME:</b>	Fire Proof Sponge
<b>MANUFACTURER/SUPPLIER:</b>	Envirograf
<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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Fireproof sponge is an "article", not a chemical. It is not classified as dangerous under the Chemicals (Hazard Information and Packaging for Supply) Regulations (CHIP), Classification, Labelling, and Packaging of Chemical Regulations (CPL) & the UN's Globally Harmonised System (GHS), and therefore does not require a Safety Data Sheet. It is exempt from the requirements to register under REACH. As a service to our customers, however, Envirograf has produced this Product Information Sheet

**Classification (EC 1272/2008)** :Not applicable  
**Classification (1999/45/EC)** :Not applicable  
**Label Elements** :Not applicable  
**Signal Word** :Not applicable  
**Hazard Statements** :Not applicable  
**Precautionary Statements** :Not applicable  
**Supplemental information** :Not applicable.  
**Other hazards** :Not applicable.

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**3. COMPOSITION / INFORMATION ON INGREDIENTS**

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<b>Chemical name</b>	<b>CAS No</b>	<b>EC No</b>	<b>REACH Reg No</b>	<b>Classification</b>	<b>Conc'n %</b>
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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**Further information:** Poly-addition products of isocyanates, polyols and water. Controlled by catalysts, stabilizers and other substances resulting in cellular polyurethane foams which are then post treated with flame retardants, and polymeric binding agent.

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**4. FIRST AID MEASURES**

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**Description of first aid measures** SEE BELOW

**Inhalation:** Consult physician if coughing, discomfort, or obstruction of air passage occurs.

**Skin contact:** Wash off any foam dust.

**Eye contact:** In case of contact with eyes, rinse immediately with plenty of water until irritation subsides. If necessary, seek medical advice.

**Ingestion:** Consult physician if coughing, discomfort, or obstruction of air passage occurs.

**Most important symptoms and effects, both acute and delayed:** None expected.

**Indication of any immediate medical attention and special treatment needed:** None expected

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**5. FIRE-FIGHTING MEASURES**

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**General hazard:** Under extreme temperatures the sponge will decompose and emit toxic gases. In the event of a fire, evacuate premises immediately and call the Fire Brigade. Avoid inhalation of smoke and gases.

**Extinguishing media:** To suit local surroundings (e.g. Water, carbon dioxide, foam, dry powder)

**Extinguishing media not to be used:** None reported

**Special exposure hazards:** Decomposition products released in a fire, (e.g. Carbon black, carbon Monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide), should be considered toxic if inhaled

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Remove all sources of ignition. No Smoking

**Methods and materials for containment and cleaning up:** Pick up and sweep up as for any other inert material

**Environmental Precautions:** Do not allow to get into waste water or waterways.

**Reference to other sections:** Not Applicable

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## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Handle in accordance with good hygiene and safety practice.

**Conditions for safe storage including any incompatibilities:** No special conditions required, but ideally to be stored in dry conditions

**Specific end use(s): Industrial and professional**

Keep away from sparks, naked lights, open flames, exposed electrical elements or other ignition sources. Smoking should be forbidden in areas where material is stored or processed

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control parameters**

**Personal protection:** Wear personal protective equipment appropriate to the task -see below.

**Eye protection:** See below.

**Skin protection:** See below

**Respiratory protection:** See below.

**Other personal protection:** Unless exposure to foam dust is anticipated, dust masks, goggles and gloves are not required. Mechanical ventilation should be considered in operations that generate large quantities of foam dust

**Environmental exposure controls:** Do not allow to get into waste water or waterways.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Physical form:</b>	Cellular foam.	
<b>Colour:</b>	Dark Grey	
<b>Odour:</b>	Faint, characteristic	
<b>Odour Threshold:</b>	Not available	
<b>Molecular weight:</b>	Not applicable	
<b>Molecular formula:</b>	Not applicable	
<b>pH:</b>	Not applicable	
<b>Melting pt/range:</b>	Not applicable	
<b>Flash point:</b>	Not applicable	
<b>Relative evaporation rate:</b>	Not applicable	
<b>General Flammability:</b>	BS EN 13501-1 Fire Propagation Index Surface Spread of Flame Building Regs. 1991 (Fire Safety)	Euroclass B-s1, d1 <12 BS476 pt 6 Class "1" BS476 pt 7 Class "0" BS476 pt 6 & pt 7
	Operating Temperature UL94 Classification Surface Burning Behaviour	-30 to 100°C 94 V-0 UL 94 Class A ASTM E84-95
<b>Explosive limits:</b>	Not applicable	
<b>Vapour pressure:</b>	Not applicable	
<b>Vapour density:</b>	Not applicable	
<b>Density:</b>	>90 kg/M3 BS EN ISO 845	
<b>Partition coefficient (log P or log K n-octanol water):</b>	Not applicable	
<b>Decomposition Temp.:</b>	Not applicable	
<b>Viscosity:</b>	Not applicable	
<b>Explosive properties:</b>	Not applicable, based on structure	
<b>Oxidising properties:</b>	Not applicable, based on structure	
<b>Other information:</b>	Not applicable	

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** Almost inert

**Chemical stability:** Stable under normal conditions of handling and storage.

**Possibility of hazardous reactions:** None reported.

**Incompatible materials:** Not applicable, based on structure.

**Hazardous decomposition products:** Decomposition products released in a fire, (e.g. carbon black, carbon monoxide, carbon dioxide oxides of nitrogen, hydrogen cyanide), should be considered toxic if inhaled.

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## 11. TOXICOLOGICAL INFORMATION

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**Information on toxicological effects:** No data available for the product.

**Acute toxicity – oral:** No data available for the product.

**Acute toxicity – inhalation:** No data available for the product.

**Acute toxicity – dermal:** No data available for the product.

**Skin corrosion/irritation:** Repeated exposure may cause skin dryness.

**Serious eye damage/irritation:** May cause eye irritation in dust form.

**Respiratory sensitisation:** No data available for the product.

**Skin sensitisation:** No data available for the product.

**CMR effects:** No data available for the product.

**Single dose toxicity:** No data available for the product

**Repeated dose toxicity:** No data available for the product.

**Aspiration hazard:** None reported.

**Adverse health effects and symptoms:** No data are available for the product..

**Other information** None .

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## 12. ECOLOGICAL INFORMATION

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**Toxicity:** No data available for product.

**Fish, acute:** No data available for product.

**Fish, chronic:** No data available for product

**Invertebrates Algae:** No data available for product.

**Soil organisms:** No data available for product.

**Micro-organisms:** No data available for product.

**Other organisms:** No data available for product.

**Persistence and degradability:** No data available for product.

**Bioaccumulative potential:** No data available for product.

**Mobility in soil** No data available for product.

**Results of PBT and vPvB assessment:** Not classified.

**Other adverse effects:** None reported.

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## 13. DISPOSAL CONSIDERATIONS

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**Advice on disposal:** Under EU Environmental Regulations and Directives, there are no special requirements for disposal of Fire Proof Sponge

**Further information:** Various methods are available for the recycling of uncontaminated cellular foam including crumbed or shredded or rebounded to produce reconstituted foam

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## 14. TRANSPORT INFORMATION

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### Land transport (ADR/RID)

**UN number:** Not applicable

**UN proper shipping name:** Not applicable

**Transport hazard class(es):** Not applicable

**Packing group:** Not applicable

**Environmental hazards:** Not applicable

**Special precautions for user:** None reported.

**Emergency action code** Not applicable

**Hazard Identification Number:**Not applicable

**Marine transport (IMDG)****UN number:** Not applicable**UN proper shipping name:** Not applicable**Transport hazard class(es):** Not applicable**Packing group:** Not applicable**Environmental hazards:** Not applicable**Special precautions for user:** None reported.**Air transport (ICAO/IATA)****UN number:** Not applicable**UN proper shipping name:** Not applicable**Transport hazard class(es):** Not applicable**Packing group:** Not applicable**Environmental hazards:** Not applicable**Special precautions for user:** None reported.

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**15. REGULATORY INFORMATION**

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**Safety, health and environmental regulations/legislation specific for product:** Not applicable**Chemical Safety Assessment:** Not applicable

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**16. OTHER INFORMATION**

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**Date of revision** 6<sup>th</sup> September 2018**Reason for revision** General review / change of format**Sections revised** All sections revised**Key to abbreviations and acronyms:**

1999/45/EC EU Dangerous Preparations Directive

ACGIH American Conference of Governmental Industrial Hygienists, Inc.

ADR European agreement governing the international carriage of dangerous goods by road

CAS No Chemical Abstracts Service Registry Number

CHIP 4 Chemicals (Hazard Information and Packaging) for Supply Regulations 2009

CLP Classification, Labelling and Packaging Regulation (EC) 1272/2008

CMR Carcinogen, Mutagen, Reprotoxin

DGEAC Dangerous Goods Emergency Action Code List 2009

EC No European Inventory of Chemical Substances number

ECHA European Chemicals Agency

EH40 (2005) HSE's list of Workplace Exposure Limits, as updated and amended

GHS Globally Harmonised System for classification and labelling chemicals

REACH Registration, Evaluation and Authorisation of Chemicals Regulation (EC) 1907/2006

RTECS Registry of Toxic Effects of Chemical Substances

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 43**  
*FOIL COATED GLASS CLOTH*

Issue 3. 26/7/2018

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

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PRODUCT NAME: Foil Coated Glass Cloth  
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

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**2. HAZARD IDENTIFICATION**

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In a sustained fire situation the coating will burn to give smoke containing carbon monoxide, carbon dioxide, hydrocarbons, nitrogen based and halogen based gases.

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

Aluminium Foil and neoprene adhesive.

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 Firefighters:** 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>  
Possible trace retained toluene = 100ppm

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance:</b>	White woven fibres / Aluminium Sheet
<b>Colour:</b>	White / Silver
<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:** Basic phosphates, alkalis, hydrofluoric acid

**Hazardous decomposition products:** Thermal decomposition: Carbon dioxide, carbon monoxide, trace amounts (ppm) hydrocarbons, nitrogen based and halogen based gases.

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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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None required

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## 16. OTHER INFORMATION

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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 87**  
**POLYURETHANE COATED WOVEN GLASS FABRIC**

Issue 2. September 2018

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

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<b>PRODUCT NAME:</b>	Polyurethane Coated Woven Glass Fabric
<b>MANUFACTURER/SUPPLIER:</b>	Envirograf
<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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In a sustained fire situation the coating will burn to give smoke containing carbon monoxide, carbon dioxide and trace amounts (ppm) of hydrocarbons, nitrogen based and halogen based gases.  
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.

*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.*

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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. Flame retardant aluminium pigmented polyurethane.

Glass fibre does not meet the classification for a 'dangerous substance' according to 67/548/EEC. Glass Fibre carries no CAS registry number and no EPA code designation number. Glass as a generic substance, the E-glass Composition included, has been incorporated in the EINECS under no. 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 & 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>  
Possible trace retained toluene = 100ppm

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance:</b>	White woven fibres with polyurethane coating both sides
<b>Colour:</b>	Grey/Red
<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:** -

**Hazardous decomposition products:** Carbon dioxide, carbon monoxide and trace amounts (ppm) of hydrocarbons, nitrogen based and halogen based gases.

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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** 11<sup>th</sup> September 2018

**Reason for revision** General review / change of format

**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

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