Product Number: 39

Intumescent Expansion Joints

Intumescent expansion joints are a composite, compressible, fireproof sponge and foil-clad Intumescent strip. They are unaffected by water or chemicals, and are easily installed. Envirograf® Intumescent expansion joints are used to fill the cavities or gaps left in buildings to allow for movement, expansion, and contraction. They can also be utilised around ducting to accommodate vibration movement, as well as sealing the top of cable trays that pass through protected parts of a building.

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

- Appendix 1 Health & Safety Sheet Intumescent
- Appendix 2 Fire Proof Sponge
- Appendix 8 Foil Tape

*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.*
Appendix 1
MULTIGRAF INTUMESCENT MATERIAL

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME: Multigraf Intumescent Material
MANUFACTURER/SUPPLIER: Envirograf
ADDRESS: Envirograf House, Barfrestone, Nr. Dover, Kent, CT15 7JG
TELEPHONE/FAX: 01304 842555 01304 842666
EMERGENCY PHONE NUMBER: 01304 842555

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL CONSTITUTION
Mineral Wool Fibre 20-70 % by weight
Exfoliating Graphite 20-60 % by weight
Organic binder (including adhesive coating) 5.0-30 % by weight

3. HAZARDS IDENTIFICATION

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.

Based on animal studies, excessive exposure to man made mineral fibre dust may cause lung damage (fibrosis) and tumours.

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

4. FIRST AID MEASURES

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.
5. FIRE FIGHTING MEASURES

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

6. ACCIDENTAL RELEASE MEASURES

Store product in original wrapping until required for use. Do not allow dust to be wind blown. Do not use compressed air to blow dust or fibres. Unwanted product should be collected and stored in sealed bags. Dust/fibre should be removed using a suitable vacuum cleaner with HEPA exhaust air filtration and disposal collection bags; used bags to be sealed before disposal. If sweeping is required the area should be damped down with water before brushing.

7. HANDLING AND STORAGE

HANDLING: Keep dust generation to a minimum.
STORAGE: Store dry and cool. Keep in original wrapping until required for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

APPLICABLE OCCUPATIONAL EXPOSURE LIMITS:
MAN MADE MINERAL FIBRE: *ME 2.0 fibres/ml & 5 mg/m; (8 hr TWA)
FINE CARBON DUST: *OES 3.5 mg/m; (8 hr TWA) and 7 mg/m; (STEL)
*(UK Health & Safety Executive - OEL EH40/98)

RESPIRATORY PROTECTION: Wear disposable dust respirator (eg. 3M 8810 or equivalent).
HAND PROTECTION: Use of 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.
9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Flexible Grey fibrous mat with black speckle
DENSITY: 200 - 500 kg/m;
EXPANSION: Rapid volumetric expansion occurs when product is heated above 100°C
FLAMMABILITY: Material will sustain combustion for a short period until organic binder (and SAB coating) is burnt out or resulting expansion self-extinguishes.

10. STABILITY AND REACTIVITY

STABILITY / CONDITIONS TO AVOID: Stable.
MATERIALS TO AVOID: Strong oxidizing agents, strong alkalis and hydrofluoric acid.
HAZARDOUS DECOMPOSITION PRODUCTS: Combustion products are HRO, CO, COR and hydrocarbons.

11. TOXICOLOGICAL INFORMATION

The International Agency for Research on Cancer (IARC) has classified Mineral Wool Fibre as possibly carcinogenic (Group 2B).

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORT INFORMATION

Not regulated for Transport. Ensure that dust is not wind blown during transportation.
15. REGULATORY INFORMATION

LABELLING
DANGER CLASSIFICATION -
CONTAINS: -
R PHRASES: -
S PHRASES: -
NATIONAL REGULATIONS: -

16. OTHER INFORMATION

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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Appendix 2
FIRE PROOF SPONGE

SECTION 1 INGREDIENTS
Fire Proof Sponge is manufactured by post treatment of flexible polyurethane with flame retardants, particulate filler and a polymeric bonding agent.

SECTION 2 PHYSICAL & SAFETY DATA

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Cellular solid, usually black</th>
</tr>
</thead>
</table>

**Typical Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density (kg/m³)</td>
<td>90 - 100</td>
</tr>
<tr>
<td>Hardness</td>
<td>130 - 180</td>
</tr>
<tr>
<td>Tensile strength (Newton’s) Min</td>
<td>70</td>
</tr>
<tr>
<td>Elongation at break % Min</td>
<td>90</td>
</tr>
</tbody>
</table>

**Typical Flammability Properties**

| BS476: Part 5 | Non Ignition |
| BS476: Part 6 | Fpi<12 |
| BS476: Part 7 | Class ‘1’ |
| BS476: Part 6+7 | Class ‘0’ |

SECTION 3 LABELLING AND CONVEYANCE
Does not classify for conveyance or supply under the Carriage of Dangerous Goods (Classification, packaging and labelling), and Use of Transportation Pressure Receptacles Regulations 1996.

SECTION 4 PROTECTIVE MEASURES

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventilation</td>
<td>No ventilation is required but precautions may be required if material is involved in operation which may produce dust such as baffling.</td>
</tr>
<tr>
<td>Respiratory Protection</td>
<td>Not necessary.</td>
</tr>
<tr>
<td>Eye Protection</td>
<td>Wear protective goggles when process generates dust.</td>
</tr>
<tr>
<td>Protective Clothing</td>
<td>Not required.</td>
</tr>
</tbody>
</table>
SECTION 5  MEASURES IN CASE OFACCIDENT & FIRES

In case of spillage Pick up or sweep up as for any other inert material.
Extinguish Media Water, CO, foam.
In case of fire Under extreme temperatures, Sponge will decompose and omit toxic gases. Sound alarm, evacuate building. Fire fighters should wear positive pressure, self contained breathing apparatus.

First Aid Procedures:
Ingestion No adverse effects anticipated.
Eye Contact Mechanical effects only, irrigate with water to remove dust.
Skin No adverse effects anticipated.
Inhalation No adverse effects anticipated.

SECTION 6  TOXICITY & HEALTH HAZARD DATA

Occupational Exposure Limits None
Ingestion Not harmful if swallowed
Eye Contact Unlikely - dust may cause irritation due to mechanical action
Skin Contact Solid - is non irritating
Inhalation No fumes

SECTION 7  ECOLOGY DATA

Degradation In water the product should not present problems due to its extremely low solubility. In soil, almost inert, may slowly biodegrade due to bacterial and fungal activity.
CFC Content CFC’s are not used in any Sponge.
Disposal: The disposal of waste foam should comply with local and government regulations, ie. Approved land fill or approved incineration.
SECTION 8  FURTHER INFORMATION

The levels of fire resistance are detailed in Section 2. If a sufficient large ignition source is used the polymeric content of the product will degrade and toxic gases and heat will be generated.

This product is classified as non hazardous as defined in Chemical (hazard information and packaging for supply) Regulations 1994 (CHIP2).

It is recommended that the following Health and Safety guidance booklet is referred to *HS(G)92 Safe Use and Storage or Cellular Plastics.
Section 1  General

Our products are considered generally safe and inert and no hazards are anticipated provided good standards of industrial hygiene and good housekeeping are observed.

Section 2  Composition

These products are normally supplied in the form of rolls of adhesive coated aluminium. Individual products differ, but the adhesive generally contains one or more of the following: Acrylates, Rubbers, Resins, E.V.A.’s, Waxes, Plasticisers, Fillers, Plus other additives.

Section 3  Storage

It is recommended that these products be stored out of direct sunlight at temperatures between five and thirty degrees centigrade.

Section 4  Handling Precautions

Due regard should be given to the possibility of static build up within the rolls and their particular applications especially where flammable solvents are used or stored. Finger damage is always a risk when aluminium foil and paper products are decoiled or applied. The use of lightweight leather gloves is recommended. Discard release paper is a slip hazard and must not be left on any floor space but disposed of together with spent cores into suitable waste containers.

Section 5  Fire

Products will burn in the event of contact with a flame, resulting in smoke and harmful fumes. Fires may be extinguished with Carbon Dioxide, Foam or Dry powder. Films and adhesives may drip before burning this may cause severe burns if skin contact is made. Do not attempt to remove adhesive, but cool down rapidly in water and seek medical advice.
Section 6  Health

Under normal conditions of handling, no hazards are anticipated but good industrial hygiene should always be observed, allergic reactions are unlikely but, should they occur, that individual should be removed from contact.

Section 7  Waste Disposal

Products should be disposed of on legal tip in compliance with local and national regulations (U.K. – DEPOSIT OF POISONOUS WASTE ACT 1972) AND CONTROL POLLUTION ACT 1974.

Section 8  Important

This information is based on our best current knowledge and is intended as a general guide to product performance.

It is not a warranty of specification, and customers must determine that the material is suitable for their particular purpose before use.