Product Number: 7

Intumescent Wraps

The Envirograf Intumescent Wrap is a foil clad wrap for pipes and cables.

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 8) Health & Safety Sheet Foil Tape
- (Appendix 9) Health & Safety Sheet Craft Paper

*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

April 2015. Issue 1

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME: Multigraf Intumescent Material
MANUFACTURER/SUPPLIER: Intumescent Systems Ltd
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)

2. 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.

3. 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

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 & stored in sealed bags. Dust/fibre should be removed using a suitable vacuum cleaner with HEPA exhaust air filtration & 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/m³ (8 hr TWA)
FINE CARBON DUST: *OES 3.5 mg/m³ (8 hr TWA) and 7 mg/m³ (STEL)
*(UK Health & Safety Executive - OEL EH40/98)
RESPIRATORY PROTECTION: Wear disposable dust respirator (e.g. 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/m³;
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.

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

- **PRODUCT NAME:** Foil-Adhesive Tape
- **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)

2. **HAZARDS IDENTIFICATION**

This product is considered generally safe and inert and no hazards are anticipated provided good standards of industrial hygiene and good housekeeping are observed.

3. **COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical description: contains no dangerous ingredients or impurities

Interleaved aluminium foil tape with rubber/resin adhesive

4. **FIRST AID MEASURES**

- **Eye Contact:** no need for first aid is anticipated
- **Skin Contact:** no need for first aid is anticipated
- **Inhalation:** the slight odour from the adhesive is not considered dangerous or an irritant – seek fresh air if necessary

5. **FIRE-FIGHTING MEASURES**

- **Suitable extinguishing Media:** Carbon dioxide, dry chemical. Note: water should not be used.
- **Protective equipment For fire-fighters:** Self-contained respiratory equipment should be worn

6. **ACCIDENTAL RELEASE MEASURES**

Not applicable
7. HANDLING AND STORAGE

Due regard should be given to the possibility of static build up within the rolls and their particular applications especially where solvents are used or stored.

It is recommended that these products be stored out of direct sunlight, in a dry environment away from moisture at temperatures between 5°C and 30°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Finger damage is always a risk when aluminum foil and paper products are decoiled or applied. The use of lightweight leather gloves is recommended. Discarded release paper is a slip hazard and just not be left on any floor space but disposed of together with spent cores into suitable waste containers.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**: solid
- **Colour**: silver
- **Boiling point**: not applicable
- **Vapour pressure**: not applicable
- **Solubility in water**: the adhesive is not soluble in water
- **Viscosity**: not applicable
- **Melting point**: the adhesive will soften at around 70°C
- **Flash point**: 200°C

10. STABILITY AND REACTIVITY

Stable under normal conditions of handling and storage.

11. TOXICOLOGICAL INFORMATION

Not applicable.

12. ECOLOGICAL INFORMATION

Not applicable.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations at approved sites.
14. TRANSPORT INFORMATION

Not regulated for transport

15. REGULATORY INFORMATION

Labelling
Danger classification -
Contains: -
R phrases: -
S phrases: -
National regulations: -

16. OTHER INFORMATION

The information contained in the Health and Safety Data Sheet is provided in accordance with the requirements of the CHIP Regulations. The product should not be used for purposes other than those shown in section 1 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 national 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.
1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME: Kraft Paper
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)

2. HAZARDS IDENTIFICATION

HAZARD STATEMENT: This product has been evaluated according to the criteria determined in the regulations and does not need any caution labelling when used appropriately. When applied in accordance with regulations there are no risks knowns for the user. The classification is based on the current legal regulations for dangerous goods as well as information of the preliminary supplier.

INFORMATION PERTAINING TO SPECIAL DANGERS FOR HUMAN AND ENVIRONMENT: In case of fire toxic gases may be generated. The decomposition of polymers (plastic material content) begins at temperatures of more than 300°C and smoke flames may occur. Vapours of the heated material may cause irritation of the respiratory tract, cough or lacrimation. Respirable dust may irritate the outer eye and the skin after longer exposure. Contact with the heated material may cause flash burn. Contact with the edges of fast moving rolls may cause cut-wounds.

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERISATION: Composite material made from – Aluminium foil / aluminium band, Polyethylene, glass filament yarn with polyvinyl alcohol as binder, Kraftpaper.

HAZARDOUS SUBSTANCES:
- Polyethylene CAS 9002-88-4 : Content: 5-25%
- Polyvinyl alcohol CAS 9002-89-5 : Content <5%

For the wording of the R- and S- clauses see section 15

IDENTIFICATION NUMBER(S): Not applicable

4. FIRST AID MEASURES

GENERAL REMARKS: In case of disturbance of health please consult a doctor.

IN CASE OF INHALATION: After inhalation of vapours of the heated material leave the sphere of influence and lead affected person into fresh air. In case the symptoms remain, please consult a physician.

IN CASE OF EYE CONTACT: Flush the eye immediately with plenty of cold water for 15 minutes holding eyelids apart. In case of lasting eye irritation or redness consult an ophthalmologist. In case of particles having entered into the eye, consult an ophthalmologist.

IN CASE OF SKIN CONTACT: In case of skin burns caused by contact with hot material cool skin immediately with plenty of cold water. Do not remove adherent polymer from skin or clothes but flush immediately with cold water. Skin burns need to be treated by a physician immediately. Secure sufficient treatment of cut wounds. In case of skin irritation caused by particles thoroughly wash the affected skin with a mild cleansing agent and water, in case the symptoms remain, please consult a physician and present this safety data sheet.

INFORMATION TO PHYSICIAN: No information available

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Water spray jet; foam; extinguishing powder or carbon dioxide. Co-ordinate fire-fighting measures to the fire surroundings.

UNSUITABLE EXTINGUISHING MEDIA: Do no use full water jet to avoid spreading the flames. No use of water in the near surroundings of activated electric installations.
SPECIAL EXPOSURE HAZARDS: In case of fire hazardous vapours and gases may be liberated: carbon monoxide; carbon dioxide and small amounts of aldehydes, ketones, organic acids or hydrocarbons. In case of incomplete combustion smoke and carbon particles may be liberated. In case of fire liberation of hazardous gases – over 350°C

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Special danger of slipping caused by loose composite material parts on the ground. Avoid generation of dust.
ENVIRONMENTAL PRECAUTIONS: Take up loose composite material parts mechanically and dispose of according to local regulations. In case greater amounts of the material have entered open water or public or other waste water systems, remove material mechanically
METHODS FOR CLEANING UP: Remove mechanically and place in appropriate containers for disposal.

7. HANDLING AND STORAGE

ADVICE ON SAFE HANDLING: Avoid heating over 300°C during heat sealing. Use local exhaust ventilation over the working area. Do not breathe smoke or vapours liberated by the melted material. Use appropriate lifting devices or industrial trucks when handling the rolls or pallets.
STORAGE: Main hazards are slipping rolls or pallets and fork-lift movements which can injure personnel. Store at room temperature and in dry, well-ventilated areas. Avoid condensation of air moisture. Do not store near to highly inflammable material. Keep away from sources of ignition. Keep away from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROL: The components mentioned in section 3 are not subject to any occupational exposure control when used properly.
PERSONAL PROTECTION EQUIPMENT: In case contact with heated surfaces during use of composite material cannot be avoided in the process, wear heat-resistant gloves.
GENERAL PROTECTION AND HYGIENE MEASURES: Clean dirty clothes by suction not by compressed air. Wash hands after handling the product, before food intake and after work is finished.
RESPIRATORY PROTECTION: To avoid the risk of over-exposure to vapours a smoke during handling the product, e.g. hot-sealing, use a local exhaust device and assure sufficient ventilation.
HAND PROTECTION: Direct contact with composite material generally does not cause skin irritation. In case contact with heated surfaces during use of composite material cannot be avoided in the process, wear heat-resistant gloves.
EYE PROTECTION: In case of possible hazards by dust, material parts or overheated polyethylene, safety glasses should be worn
PROTECTIVE CLOTHING: Standard: working clothes and safety shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/COLOUR/PHYSICAL STATE: Shiny metallic, kraft paper brown backing with typical scrim structure
ODOUR: Not typical odour under normal storage conditions
MELTING POINT/MELTING RANGE: Not determinable as composite material
FLASH POINT: Over 300°C the polyethylene may decompose and smoke may appear
SPONTANEOUS COMBUSTIBILITY: Polyethylene-part: Over 350°C
EXPLOSION RISK: Not explosive
RELATIVE DENSITY: Not determinable as composite material. Aluminium foil: about 2,700kg/m³. Kraft paper: not determined. Stitchbonded glass: about 2,000kg/m³. Polyethylene: about 920-960kg/m³
10. STABILITY AND REACTIVITY

STABILITY: Stable at conventional use and storage
CONDITIONS TO AVOID: Avoid heating on air > 300°C during heat-sealing, danger of liberation of decomposition products
MATERIALS TO AVOID: Highly oxygenating materials
HAZARDOUS DECOMPOSITION PRODUCTS: No spontaneous decomposition under normal storage conditions. Hazardous combustion products may contain carbon monoxide, carbon dioxide and small amounts of aldehydes, ketones, organic acids or hydrocarbons. In case of incomplete combustion smoke and carbon particles may be liberated.

11. TOXICOLOGICAL INFORMATION

TOXICITY TESTS: No data available for this product. No reports giving indication for acute toxicity
PRACTICAL EXPERIENCE: No data available
ADDITIONAL TOXICOLOGICAL INFORMATION: No reports on negative long-term effects when used appropriately. No classification according to ordinance on hazardous substances

12. ECOLOGICAL INFORMATION

ECOTOXICITY: No reports on possible ecotoxicity available
MOBILITY: Not applicable
PERSISTENCE AND DEGRADABILITY: Not applicable
BIOACCUMULATIVE POTENTIAL: Not applicable
RESULTS OF PBT ASSESSMENT: No information available
GENERAL INFORMATION / OTHER ADVERSE EFFECTS: The product, as solid composite material, does not have ecotoxicological effects on the environment. The polyethylene part is water-insoluble, indifferent, non-dispersible, solid plastic material. No water-endangerment known for aluminium foil and other components. WGK 0 (self-rating)

13. DISPOSAL CONSIDERATIONS

PRODUCT: Recycling if possible, otherwise disposal according to local regulations or incineration in appropriate waste incineration plant.
PACKAGING: Packaging should be recycled or disposed of following the local regulations.
FURTHER DISPOSAL CONSIDERATIONS: Waste code: EAK 150105 – composite packaging

14. TRANSPORT INFORMATION

UN CLASS (PRODUCT & PACKAGING): Not classified
ADR / RID CLASS: Not classified
GGVS / GGVE: Not classified
IMDG CLASS: Not classified
GGVSee: Not classified
IATA CLASS: Not classified
15. REGULATORY INFORMATION

CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment (REACH) of the components contained in this product has not yet been made.

LABELLING ACCORDING TO EG-RL
R-PHRASES: -
S-PHRASES: S-22 do not breathe dust
S-36/37 wear appropriate protective gloves and protective clothing during work

NATIONAL REGULATIONS: This product does not have to be labelled according to currently valid ordinance on hazardous substances as well as EU regulations. WGK 0 – not water-endangering.

16. OTHER INFORMATION

The information contained in the Health and Safety Data Sheet is provided in accordance with the requirements of the CHIP Regulations. The product should not be used for purposes other than those shown in section 1 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 national 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.