

Product Name: FIREFLY® PENOWRAP

Revision Date: 29.05.2023

Version: 1

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name: FIREFLY® PENOWRAP

1.2 Relevant identified uses of the substance or mixture and advises against

Identified uses: This is a lightweight, composite, flexible fire resistance wrap. Used as part of the FIREFLY™ fire barrier system.

1.3 Details of the supplier of the safety data sheet

Address

TBA Protective Technologies Ltd
Unit 3, Transpennine Industrial Estate Gorrells Way
Rochdale, Lancashire, OL11 2PX

Email

info@tba-pt.com

1.4 Emergency Telephone Number

+44 (0)1706 647 422

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or the mixture

Classification according to Regulation (EC) No 1272/2008:

Not applicable. This product is not classified under the European Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP) and its subsequent amendments.

2.2 Label elements

Hazard Pictograms: Not applicable

Signal Word: Not applicable

Hazard Statements: Not applicable

Precautionary Statements: Not applicable

2.3 Other Hazards

Physical / Chemical Hazards:

Users should be aware that the product is manufactured from silica fibres which, during handling and application, there is a possibility of formation of dust containing silica-acid anhydride. This has the potential to cause irritation of the skin, the eyes, nose or throat.

Health Hazards:

If (silica fibres) dust is generated, it may cause temporary irritation or rash on skin . It may also cause temporary irritation or inflammation on eye contact. The products do not constitute a respirable hazard.

Environmental Hazards:

Not classified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not Applicable. This material is regulated as a mixture.

3.2 Mixtures

Description of Mixture:

Multi-layered composite material consisting of a nonwoven needlefelt that is manufactured using silica fibres, laminated with a thin layer of aluminium foil using an acrylic-based adhesive system.

Hazardous ingredients:

The adhesive system used contains 2-Ethylhexyl acrylate (CAS-103-11-7), in a cured form at less than 0.1%.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Skin: Wash affected areas with soap and cold water (Do not use warm water as this will open up the pores and cause further penetration of the fibres). Do not rub or scratch affected areas. Remove contaminated clothing.

Ingestion: If silica fibres accidentally swallowed drink large quantity of water to drink.

Eyes: Wash with large quantities with clean, fresh water for at least 15 minutes holding eyelids apart. Seek medical advice if needed.

Inhalation: Remove to fresh air.

Other first aid information: In all cases of doubt or when symptoms persist or other cases, seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Eye contact: May cause irritation or redness of the eye.

Ingestion: No symptoms

Skin contact: When in contact with skin, the mechanical effects of the fibre might cause temporary itching.

Inhalation: No symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

The need to have special means for providing specific and immediate medical treatment available in the workplace is not expected.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media This product is inherently non-flammable.

Suitable extinguishing media: All standard firefighting media (water, dry powder, CO₂ and alcohol-resistant foam).

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Above 200°C the water-based adhesive system may rapidly carbonise leaving char. Carbon monoxide, carbon dioxide, hydrogen and other undetermined compounds could be released in small quantities.

5.3 Advice for firefighters

Special fire fighting procedures: In large fires, wear self-contained respiratory protective device.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact. Wear suitable personnel protective equipment (gloves/protective clothing/eye protection/face protection).

6.2 Environmental precautions

Not applicable.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Clean-up mechanically (by sweeping) and dispose off as per Section 13.

6.4 Reference to other sections:

Refer to Section 7 for safe handling, Section 8 for personal protection and Section 13 for Waste disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Minimise airborne dust. Wear an approved mask or respirator if dust concentration exceeds local control limits or dust concentration is not known. Accumulated dust should be removed using the safest practicable method, preferably by high efficiency particulate air (HEPA) filtered vacuum collection or wet cleaning.

7.2 Conditions for safe storage, including any incompatibilities

Store in original wrappings in cool, dry conditions away from direct sunlight. Keep out of reach of children. Ensure good housekeeping and regular safe removal of waste materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure controls for hazardous components:

Substance	Occupational Exposure limit		Work Exposure limit (WEL)
	8 hr LTEL (mgm ⁻³)	15 min STEL (mgm ⁻³)	
Mineral fibres	5	Not applicable	2 fibres/ml
Dust (inhalable)	10	Not applicable	Not applicable
Dust (respirable) if inhalable dust	4	Not applicable	Not applicable

where:

LTEL: Long-term exposure limit – 8 hour time weighted average

STEL Short-term exposure limit – 15 mins time weighted average

8.2 Exposure controls

Engineering controls:

Provide local exhaust and/or general ventilation. Should this not be practicable, it is recommended that Respiratory Protective Equipment (RPE) is employed to eliminate the possibility of inhalation exposure.

Personal Protection:

Personal protective equipment should be used, especially when material is cut into.

Respiratory: Wearing appropriate face mask.

Skin/Hand: Wear suitable protective clothing of a closely woven structure and rubber or plastic gloves. Arm cuffs and barrier creams are also recommended.

Eye: Safety glasses with side shields should always be worn to prevent silica fibres entering the eye.

Hygiene: Wash hands (with plenty of cold water) before breaks and immediately after handling products. Remove contaminated clothing. When using these products do not eat, drink or smoke.

Environmental controls

Not applicable.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Solid, 30 cm wide tape.

Colour: White fibres and silver foil.

Melting point/Melting range: >660.3°C for Aluminium,
>1600°C for silica.

Boiling point/Boiling range: Not applicable.

Solubility: Not applicable.

Weight: 2.65 kg/m³

Flashpoint: Not applicable.

pH: Not applicable.

10. STABILITY AND REACTIVITY

10.1 Reactivity

The product is stable and un-reactive under normal conditions of use and storage.

10.2 Chemical stability

The product is stable and un-reactive under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

See Section 10.3.

10.5 Incompatible materials

See Section 10.3.

10.6 Hazardous decomposition products

Oxides of carbon released under high temperature conditions (>200 °C).

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

There is no evidence of toxicological effects of the product itself.

Skin corrosion/irritation: Prolonged contact may cause slight skin irritation with local redness.

Serious eye damage/eye irritation: Risk of mechanical irritation to eyes.

Sensitisation: Not sensitising.

Ingestion: Not classified.

Aspiration Hazard: May be harmful if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

No known harmful effects on the environment.

13. WASTE DISPOSAL

Dispose of this product in accordance with local or national requirements.

14. TRANSPORT INFORMATION

Transport within the users premises:

No special requirements. This product is not covered by international regulations on the transport of dangerous goods.

Onwards transport subsequent to purchase:

No special requirements.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No labelling is required for this material under the European Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP) and its subsequent amendments.

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV	None of the components are listed.
Substances of very high concern	None of the components are listed.

15.2 Chemical Safety Assessment: Not applicable

16. OTHER INFORMATION

History:

Date of issue / Date of revision: 29.05.2023
Prepared by: MA & KG
Version: 1

Disclaimer

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products. TBA Protective Technologies Ltd shall not be held responsible for any defect in the product covered by this SDS should the existence of such defect not be detectable considering the current state of scientific and technical knowledge.