

SAFETY DATA SHEET

Bituminous Roofing Membranes

This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the consumer and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. This Safety Data Sheet is prepared in accordance with formatting described in the REACH Regulation (EC) No 1907/2006, and described in CLP Regulation (EC) No 1272/2008.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier**
Bituminous Roofing Membranes
(see Section 16 for a full list of products to which this SDS applies)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Roofing membranes.
- 1.3 Details of the supplier of the safety data sheet**
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SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification in accordance with the Dangerous Preparations Directive 1999/45/EC

The product is an article, therefore no classification is required.

Classification in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008

The product is an article, therefore no classification is required.

2.2 Label elements

Labelling in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008

None required.

2.3 Other hazards

Under normal conditions of use, this product is not expected to create any unusual emergency hazards. Due to product form, exposure to dusts and fumes is not expected to occur.

SECTION 3: Composition / Information on Ingredients

3.1 Substances

Not applicable, product is an article.

3.2 Mixtures

The products are not mixtures under the CLP Regulation (EC) No 1272/2008, but are considered to be articles. The products in the range consist of a reinforcing base material coated with bitumen and a surface finish. The base materials include polyester, glass/polyester and glass fibres in sheet form, some used in conjunction with aluminium foil. The bitumen coating may contain mineral filler and/or synthetic polymers. The fire performance cap sheets have an inert graphite coating on the upper surface of the base carrier and the fire performance vapour control layers have a fire retardant modified bitumen coating. The surface finish may be sand, talc, mineral granules or polymeric film.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

EYE CONTACT:	For contact with cold material, e.g. small particles, wash thoroughly with water and obtain medical attention if signs of discomfort persist. In case of contact with hot material, flood eye with copious quantities of cold water for 10-15 minutes. Do not try to remove material adhering to the eye. Cover the burn area loosely with a sterile dressing, if available. Seek immediate medical attention.
SKIN CONTACT:	For contact with hot material, cool the affected area under cold running water for at least 10 minutes. Do not attempt to remove anything from the burn area or apply burn creams or ointments. Material adhering to skin will form a sterile barrier which will fall off after a few days. Cover the burn area loosely with a sterile dressing, if available. Seek immediate medical attention.
INHALATION:	In case of inhalation of fumes, remove from exposure. If breathing becomes difficult seek medical assistance.
INGESTION:	If swallowed, rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

Eyes:	Particulates produced from cutting, grinding or drilling of the product may cause mechanical irritation of the eye. Hot melt products may cause thermal burns.
Skin:	This product may produce skin abrasions. Mechanical rubbing may increase skin irritation. Hot melt products may cause thermal burns.
Ingestion:	Not a likely route of entry.
Inhalation:	Inhalation of dusts produced during cutting, grinding or sanding of this product or fumes from hot melt products may cause irritation of the mouth and nose and coughing.

4.3 Indication of any immediate medical attention and special treatments needed

Symptomatic treatment as required

SECTION 5: Firefighting Measures

5.1 Extinguishing media

Use any media suitable for the surrounding fires. Water, spray, fog, carbon dioxide (CO₂), dry chemical, foam.

5.2 Special hazards arising from the substance or mixture

Standard bitumen based roofing membranes are combustible and release dense black smoke when they burn. Fire performance membranes such as Ultra prevENT, Mach One and Safestick cap sheets have an inert graphite coating on the upper surface of the base carrier, which when installed produces a significant reduction in the capacity of the product to burn and reduces smoke emission in a fire situation

5.3 Advice for fire fighters

Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products. Do not release chemically contaminated water into drains, soil or surface water.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

None usually necessary. If there are significant quantities of dust/shavings wear safety glasses with side-shields or safety goggles and gloves.

6.2 Environmental precautions

None usually necessary

6.3 Methods and materials for containment and clearing up

Sweep up or gather material and place in appropriate container for disposal.

6.4 References to other sections

See sections 8 and 13 for further advice on protective clothing and disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Customary personal hygiene measures, such as washing hands after working with these products are recommended. If dusts or fumes of this product are generated, avoid inhalation, skin and eye contact.

7.2 Conditions for safe storage, including any incompatibilities

Room temperature - normal conditions. Warehouse storage should be in accordance with package directions. Material should be kept dry, and protected from the elements.

7.3 Specific end uses(s)

No special requirements.

SECTION 8. Exposure Controls/Personal Protection

8.1 Control parameters

No specific exposure limits available.

If process generated dusts or fumes are likely, follow workplace regulatory exposure limits for relevant hazards (e.g. total dust, respirable dust, silica, talc, asphalt fumes). See Annex 1 for further information.

8.2 Exposure controls

Engineering Controls: No special protective measures are necessary for use of this product in that it is an article, and under normal conditions of use is not expected to release, or otherwise result in exposure to a hazardous chemical. If cutting, grinding, drilling, etc. ensure that there is adequate ventilation to keep dust levels within required limits.

Personal Protective Equipment:

Eyes/Face: Where there is a risk of damage to the eyes/face from splashing of hot product or impact, wear eye/face protection to EN166.

Skin: The use of heavy duty gloves to protect against skin abrasion and burns through contact with hot bitumen or flame of gas torch during installation is recommended.

Respiratory: Not required under normal conditions of use. If dust or fumes are generated, wear appropriate respiratory protection.

Environmental Exposure Controls: Not usually required.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Grey – black toned solid material. A variety of coloured slate finishes are available on top layer felts.

Odour: None

Odour threshold: Not Applicable

pH: Not Applicable

Boiling Point:	Not Applicable
Melting Point:	Not applicable
Flash Point:	Not Applicable
Evaporation rate:	Not Applicable
Flammability(gas, solids):	Standard bitumen based roofing membranes are combustible. Fire performance membranes have a significantly reduced capacity to burn.
Upper/lower flammability limits:	Not Applicable
Vapour Pressure:	Not Applicable
Vapour Density:	Not Applicable
Specific Gravity:	Not applicable
Solubility (H2O):	Not soluble
Solubility in other solvents:	Not Applicable
Auto Ignition Temp.:	No data
Decomposition temperature:	No data
Viscosity:	Not Applicable
Explosive properties:	Not classified as explosive
Oxidising properties:	Not classified as oxidising

9.2 Other information

None

SECTION 10: Chemical Stability and Reactivity

10.1 Reactivity

Not considered a reactive material.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None expected.

10.4 Conditions to avoid

None identified.

10.5 Incompatible materials

None identified.

10.6 Hazardous decomposition products

Bitumen fumes and dense black smoke if heated to excessive temperatures.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

- | | |
|---|--|
| (a) acute toxicity | Not expected to present an acute toxicity hazard. Inhalation of fumes may result in irritation, especially if the product is overheated above recommended temperatures |
| (b) skin corrosion/irritation | Mechanical abrasion may occur in contact with skin. Thermal burns when handled at elevated temperatures. |
| (c) serious eye damage/irritation | Not expected to present a hazard to the eyes. Mechanical irritation may occur in contact with particles. Thermal burns when handled at elevated temperatures. |
| (d) respiratory/skin sensitisation | Not considered to be a skin or respiratory sensitiser |
| (e) germ cell mutagenicity | Contains no components known to be mutagenic. |

- (f) **carcinogenicity** Bitumen may contain substances including polyaromatic hydrocarbons (PAHs), some types of which have been associated with cancer. However, long-term studies of bitumen and asphalt workers have not demonstrated any increased cancer risk from the use of these products, and bitumen has been classified by IARC as Group 3, Not classifiable as to its carcinogenicity to humans.
- (g) **reproductive toxicity** Contains no components known to be hazardous to reproduction.
- (h) **STOT-single exposure** For Torch-on grades, inhalation of fumes may result in irritation, especially if the product is overheated above recommended temperatures.
- (i) **STOT-repeated exposure** No chronic health effects are expected from the normal use of this product.
- (j) **aspiration hazard** Not relevant.

SECTION 12: Ecological Information

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

12.1 Toxicity

Not expected to be toxic to the environment.

12.2 Persistence and degradability

Not expected to be biodegradable.

12.3 Bioaccumulative potential

Not expected to bioaccumulate.

12.4 Mobility in soil

Not expected to be mobile in the environment.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

None known.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Dispose of in accordance with local regulations.

SECTION 14: Transport Information

Not considered to be dangerous goods for transport.

SECTION 15: Regulatory Information

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

All components are listed as existing substances in Europe

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

SECTION 16: Other Information

Other information:

This safety data sheet is prepared in accordance with the formatting described in Commission Regulation (EU) No 453/2010.

List of Abbreviations used in this SDS:

CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging Regulation (EC) no 1272/2008
DSD Dangerous Substances Directive 67/548/EEC
DPD Dangerous Preparations Directive 1999/45/EC
EC European Community/Commission
PBT Persistent, Bioaccumulative and Toxic
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) no 1907/2006
vPvB very Persistent, very Bioaccumulative

Disclaimer: Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

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ANNEX 1 – List of products and OELs for potential process generated inhalation hazards

Roofing felts present no inhalation hazard as supplied, however some process activities may result in the generation of either inhalable particles (use of power tools for sanding, cutting, grinding, etc.) or inhalable fumes (heating). The following information is provided to assist employers with assessing any process generated hazards.

PRODUCT	SUBSTANCE			
	(See notes below for occupational exposure limits of substances)			
	Silica ¹	Talc ²	Rag or Glassfibre ³	Bitumen ⁴
Specification Roofing Range				✓
UPXL T-O Cap Sheets	✓			✓
UPXL T-F Cap Sheets	✓			✓
Ultra prevENT P&R Cap Sheet Slate	✓			✓
Ultra prevENT T-O Cap Sheet Slate	✓			✓
Mach One Cap Sheet Slate	✓			✓
Safestick prevENT Cap Sheet Slate	✓			✓
Safestick prevENT Underlay	✓			✓
Goldseal P&R Cap Sheet Slate	✓			✓
Goldseal T-O Cap Sheet Slate	✓			✓
Superflex P&R Cap Sheet Slate	✓			✓
Superflex T-O Cap Sheet Slate	✓			✓
Systems P&R Underlay	✓			✓
Systems T-O Underlay	✓			✓
Systems S-A Underlay	✓			✓
UPXL S-A Underlay	✓			✓
Systems S-A Detailing Underlay	✓			✓
Systems P&R Vapour Control Layer	✓			✓
Systems T-O Vapour Control Layer	✓			✓
Systems S-A Vapour Control Layer	✓			✓
Commercial and Standard Roofing Ranges				
Permatorch 4.5 APP T-O Cap Sheet Slate	✓			✓
Permatorch Plus Cap Sheet Slate	✓			✓
ProTorch SBS T-O Cap Sheet Slate	✓			✓
Turbo Torch T-O Cap Sheet Slate	✓			✓
TGX SBS T-O Cap Sheet Slate	✓			✓
Adesso APP T-O Cap Sheet Slate	✓			✓
IKO SBS T-O Cap Sheet Slate	✓			✓
IKO APP T-O Cap Sheet Slate	✓			✓
IKO 4KG APP Plain Waterproofing Membrane	✓		✓	✓
IKO SBS Standard Underlay	✓			✓
IKO SBS Premium Underlay	✓			✓
IKO APP Polyester Universal Underlay	✓			✓
IKO APP Glass Universal Underlay	✓		✓	✓
IKO T-O Venting Layer			✓	✓
Torflex SBS / APP T-O Cap Sheets Slate	✓			✓
Torflex APP Smooth T-O Underlay		✓		✓
Challenger SBS P&R Sand & Slate	✓			✓
Challenger Polyester P&R Sand &	✓			✓

Slate				
Elastomeric SBS P&R Sand & Slate	✓			✓
Marley Polyester / Lightweight Polyester P&R Sand	✓			✓
Coldseal Cap Sheet	✓			✓
Coldseal Underlay			✓	✓
Specialist Roofing Products & Accessory Items				
Permatorch Anti-Root	✓			✓
Superflex T-O Copper			✓	✓
Quadra PrevENT T-O Dark Grey Slate	✓			✓
Quadra Rock Partial Bond T-O Underlay	✓			✓
Polygum PrevENT T-O Dark Grey Slate	✓			✓
PermaGUARD-F	✓			✓
Polimar Preparation Layer	✓		✓	✓
Pre-formed details	✓			✓
Superflex Pipe & Outlet Flashing Plain / Slate	✓			✓
Traditional & Retail Roofing Range				
IKO Perforated Slate Underlay	✓		✓	✓
IKO Glass Fibre Underlay	✓		✓	✓
IKO Glass Fibre Capsheet	✓		✓	✓
IKO Perforated Sand Underlay	✓		✓	✓
IKO Glass Fibre SBS Capsheet	✓		✓	✓
IKO Undertile Felt	✓			✓
IKO Eaves Protection Strip	✓			✓
IKO Trade Underlay - Medium - Heavy	✓			✓
IKO Shed Felt	✓		✓	✓
IKO Trade Top Sheet	✓			✓
Bituminous Roofing Shingles	✓		✓	✓
Shed Felt Slate / Super Shed Felt Slate	✓		✓	✓
Traditional Garage Underlay / Top Sheet	✓			✓
Self-Adhesive Underlay / Top Sheet	✓		✓	✓

NOTES

1. Silica is present as a constituent of the sand and mineral slate surfaced finishes used. The WEL, 8 hour TWA for amorphous silica is 6 mg/m³ (inhalable dust) and 2.4 mg/m³ (respirable dust).
2. Talc is present as a surface finish. The WEL, 8-hour TWA, for respirable dust is 0.1 mg/m³.
3. Glass fibre is present as a reinforcing base encapsulated in bitumen. Exposure levels are likely to be very low in normal use. The WELs, 8-hour TWA, are 5mg/m³, for total inhalable dust, and 2 fibres/ml, when determined by an HSC approved method.
4. All products listed above contain bitumen. The WELs for Asphalt, Petroleum Fumes (bitumen) are 5 mg/m³ (8-hour TWA) and 10 mg/m³ (15 min ref period).