

## PRODUCT DATA SHEET

### OVERVIEW

As per Decree Law No. 65, 14 March, 2003 regarding "the classification and discipline of the packaging and labeling of harmful preparations in implementation of the directives issued by the "European Community Commission and Board" the product considered is not deemed subject to the obligatory issue of a safety data sheet because it is a manufacturer item and as such is not included in the range of application of the law which regards only harmful preparations.

The information below is provided in order to permit correct use, utilizing for the purpose the 16-point scheme specified in M.D. 7 September 2002 – and leaving the sections clearly inapplicable to the product in question blank.

#### 1. IDENTIFICATION OF THE MANUFACTURED ITEM AND THE MANUFACTURER

1.1 Product name: **Waterproofing bituminous polymer membrane in rolls**

1.2 Manufacturer:

1.2.1 Productive unit:

1.3 In case of emergency, call no.:

#### 2. INFORMATION ON INGREDIENTS

No harmful substances as per Directive 67/548/CE and amendments are contained.

#### 3. INDICATIONS OF DANGER

Inapplicable.

#### 4. FIRST AID

**In case of inhalation** of fumes during flaming, especially in closed areas, take the victim out of the workplace, make him or her breathe fresh air, and contact a physician.

**In case of contact with the skin** with molten material, rinse for a long time with fresh water; do not attempt to remove the material from the skin; do not use solvents to remove the material. Remove any contaminated clothing that does not stick to the skin. Contact a physician.

**In case of contact with the eyes** with molten material, rinse immediately and abundantly with fresh water for at least 15 minutes; do not attempt to remove particles of substance from the eyes. Contact a specialized physician. Wherever irritation by fumes is observed, rinse abundantly with fresh water.

**In case of swallowing** contact a physician immediately.

#### 5. FIRE-FIGHTING MEASURES

In case of fire, extinguish using water mist, carbon dioxide, chemical powder, fire-fighting foam. Do not use sprays of water.

Wear UP-type facemasks with filter (for universal protection combined with protection against combustion gases and fumes, including CO<sub>2</sub>).

#### 6. MEASURES IN CASE OF SPILLING OR LEAKAGE

Inapplicable.

#### 7. STORAGE AND LAYING

##### 7.1 Storage

Store the rolls standing upright out of direct sunlight (temperature in the range of 0 - 40°C) and far from sources of heat and electrical power systems. No special measures are required to prevent the accumulation of electrostatic discharge.

Keep adequate fire extinguishers within reach.

## 7.2 Laying

Wear appropriate personal protective equipment (c.f. Point 8).

Avoid laying the product in closed rooms and/or without adequate ventilation (c.f. Point 8).

Observe the workplace health and safety rules specified by the laws in force.

Keep adequate fire extinguishers within reach.

Molten material can cause burns during laying.

The use of open flames – especially if unsupervised – can create risk of fire.

Whenever laying is performed with the use of flame or hot air on membranes with sides covered with heat-melting film, the right heating temperature is indicated by the complete retraction of such film, whereas with talc or mineral surfaces, blackening or the appearance of a shiny surface indicates sufficient heating for adhesion to surfaces. The correct laying procedure is indicated by the trickle of a little molten mixture along the overlapping line. This trickle of molten material must not exceed 1÷2 cm.

Additional touch-ups and puttying must be avoided because they damage both the mixture and the armature while creating needless emission of vapors. During laying by flaming, the colour of the flame must remain blue because reddish colour is a sign of excessive heating that must be avoided. When laying molten bitumen, the use of a thermometer permits the control of the temperature of the burner being used to melt the bitumen.

## 8. MEASURES AGAINST EXCESSIVE EXPOSURE AND INDIVIDUAL PROTECTION

8.1 Recommended personal protective equipment:

- Protection of the hands: wear appropriate safety gloves.

- Protection of the eyes: wear goggles and facemask.

- Protection of the skin: wear appropriate protective clothing.

8.2 The indoor application of this product must be made in rooms provided with adequate systems for the suction of the fumes generated during flaming.

When laying is performed in closed areas with insufficient ventilation, individual respiration protection must be used composed of facemask with AP-type filter (for protection against organic vapors, dust, fumes, and spray paint with P3 protection index).

Limits to exposure: TLV/TWA = 0.5 mg/m<sup>3</sup> of inhalable particulate removable with benzene (asphalt fumes) A4.

8.3 Wash your hands before and after work.

Keep all work garments in a separate place.

## 9. PHYSICAL/CHEMICAL PROPERTIES

- Appearance: membrane in rolls

- Odor: slight, of bitumen

- pH: inapplicable

- Boiling point/interval: > +470°C ca. (bitumen)

- Melting point/interval: > +100°C

- Flash point: > +230°C ca. (bitumen)

- Flammability (solids, gases): heating power: approx. 9,000 kCal/kg

- Autoflammability: > +485°C ca. (bitumen)

- Explosive properties: NO

- Combustion properties: NO

- Steam pressure: inapplicable

- Density: 1÷1.5 kg/dm<sup>3</sup>

- Solubility: water solubility NO

Liposolubility: YES (organic solvents, oils)

## 10. STABILITY AND REACTIVITY

Inapplicable.



#### 11. TOXICOLOGICAL INFORMATION

This is a bitumen and thermoplastic polymer based product that does not contain coal tar or asbestos, and as such does not pose risk of any kind.

In molten state, the compound or the bitumen present can cause burns.

Whenever laying is performed incorrectly without taking the precautionary measures indicated in Points 7 and 8, the irritation of the eyes, respiratory tract, and skin can occur, together with sensitization effect on the respiratory tract and skin that may lead to dermatitis and conjunctivitis.

Workers who handle the product regularly are required to undergo medical check-ups as specified in Decree Law 25/2002.

Laying the product for the waterproofing of surfaces using bituminous membrane after flaming creates a modest dispersion in the air of Aromatic Polycyclic Hydrocarbons (APH). Environmental APH concentrations are on average less than 3 orders of magnitude in regard to the occupational limits established or recommended by associations and agencies for the protection of workers' health in the workplace. The environmental levels measured do not differ from the basic environmental concentrations that can be measured in the metropolitan area. (Bertazzi P.A., Foà V., Fustinoni S. "Occupational exposure to Aromatic Polycyclic Hydrocarbons (APH) during the laying of bituminous membrane", University of Milan, Department of Work Medicine, Milan, 2005).

#### 12. ECOLOGICAL INFORMATION

The product must be used by adopting sound operative practices and preventing the dispersion of the product in the environment.

#### 13. CONSIDERATIONS ON ELIMINATION

The product must be considered a non-hazardous waste as per the sense and effect of Decree Law No. 152 dated 3 April 2006.

The only way that the product can be eliminated is by taking it to an authorized elimination center.

#### 14. TRANSPORT INFORMATION

The product does not pose risk during transport.

#### 15. REGULATORY INFORMATION

**EU:** Directive 67/548/CEE dated 27 June 1967, 1999/45/CE dated 31 May 1999, 91/155/CEE dated 5 March 1991 and their amendments.

**Italy:** Decree Law No. 65 dated 14 March, 2003, DPR 27 No. 547 dated April, 1955, DPR 19 No. 303 dated 7 March, 1956, DPR No. 482 dated 9 June, 1975, Decree Law No. 152, 3 April, 2006, DPR No. 336 dated 13 April, 1994, Decree Law No. 626, dated 19 September, 1994 (the content of Section VII is not applied), Decree Law NO. 25 dated 2 February, 2002, Decree Law No. 52 dated 3 February, 1997 and modifications, and every other national law applicable.

#### 16. OTHER INFORMATION

The sources of data used for the preparation of this technical data sheet include:

Higher Health Institute - Protocol 30189/TOA6 dated 10 October, 1997 "Classification of harmfulness of bitumen and tar", NIOSH Registry of toxic effects of chemical substances, SAX Dangerous Properties of industrial materials Bertazzi P.A., Foà V., Fustinoni S. "Occupational exposure to Aromatic Polycyclic Hydrocarbons (APH) during the laying of bituminous membrane", University of Milan, Department of Work Medicine, Milan, 2005.

The information contained in this product technical data sheet is provided to the best of our current knowledge, with no contractual guarantee, and is subject to change.

The product must be stored and used in accordance with the rules of hygiene, safety, and sound industrial practice according to the technical instructions of the supplier and as prescribed by law.