



## SAFETY INFORMATION DATA SHEET

### Reinforced bitumen sheets for roof waterproofing

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#### PRELIMINARY REMARKS

*In compliance with current legislation on substances and mixtures, especially Regulation REACH (EC) N° 1907/2006 and Regulation CLP (EC) N° 1272/2008, the product subject of this documentation is defined an "article".*

*Unlike suppliers of substances and mixtures, suppliers of articles are not required to provide its customers standardized information<sup>1</sup>.*

*The product covered by this document is not subject of issuance of Safety Data Sheet (SDS). However, it seems appropriate, in order to allow a correct use, to provide the following information using the scheme in sixteen points of Annex II of the REACH Regulation.*

#### 1. PRODUCT AND PRODUCER IDENTIFICATION

- 1.1. PRODUCT IDENTIFIER: Waterproofing membrane
- 1.2. RELEVANT USE: Waterproofing applications
- 1.3. PRODUCER IDENTIFICATION  
Name: PLUVITEC S.p.a.  
Address: Via Quadrelli 69 – 37055 Ronco all'Adige (VR)  
E-mail: info@pluvitec.com
- 1.4. EMERGENCY TELEPHONE NUMBER: +39 045 6608111

#### 2. HAZARD IDENTIFICATION

- 2.1. CLASSIFICATION. The product is not classified as hazardous in accordance with the national regulation (D.Lgs. n. 65/03 and subsequent modifications).
- 2.2. HEALTH RISK Acute nose and throat irritation are possible during the heat treatment and application of the product, especially in indoor or poorly ventilated environments, due to the inhalation of potentially hazardous substances such as gas and condensed fumes.
- 2.3. SAFETY RISK The molten product may adhere to the skin and may cause burns. The presence of inflammable materials (HC vapours, etc.) may cause fire events.
- 2.4. ENVIRONMENTAL RISKS Membranes may cause long-term adverse effects because their components are not biodegradable.

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<sup>1</sup> with the exception of articles that contain SVHC (Substances of Very High Concern) in a concentration above 0.1% weight by weight (w/w), for which information must be provided in accordance with Article 33 of the REACH Regulation.



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#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1. COMPOSITION. The product consists in a mixture of penetration grade bitumen and polyolefin and/or elastomer polymers , manufactured in membrane rolls.
- 3.2. INFORMATION ON INGREDIENTS: The product does not contain any hazardous components in accordance with the national regulation (D.Lgs. n. 65/03 and subsequent modifications).

#### 4. FIRST AID MEASURES

- 4.1. INHALATION In case of long-term inhalation of fumes, particularly in indoor or poorly ventilated environments, move person to fresh air and call for medical assistance.
- 4.2. SKIN CONTACT In case of skin contact with molten product, immediately flush skin with plenty of fresh water. Do not pull solidified product away from the skin by using solvents. Remove contaminated clothing immediately and seek immediate medical advice.
- 4.3. EYE CONTACT If substance has got into eyes, wash out with water for at least 15 minutes and seek immediate medical attention. Do not pull product away from the eye. In case of irritation by fumes wash out with cold water.
- 4.4. INGESTION: Seek immediate medical attention.

#### 5. FIREFIGHTING MEASURES

- 5.1. EXTINGUISHING MEDIA : CO<sub>2</sub>, nebulized water, foam, dry chemical. Do not use direct stream of water to extinguish.
- 5.2. PERSONAL PROTECTION: In the event of fire, use supplied air respirators with universal filter U.P.  
In the case of indoor or poorly ventilated environments the personnel involved must be equipped with the breathing apparatus

#### 6. ACCIDENTAL RELEASE MEASURES

Not applicable.



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#### 7. HANDLING AND STORAGE

- 7.1. **CONDITIONS FOR SAFE STORAGE** Protect material from heat and direct sunlight (temperature 0°- 40°C) and keep away from electrical equipment. Keep rolls in a vertical position and do not stack them. For safe storage follow the specific storage recommendations for this product. It is not necessary to take precautionary measures to prevent the formation of static electricity. Open flames are prohibited. Keep extinguish media available (Point 5).
- 7.2. **PRECAUTIONS FOR SAFE HANDLING**  
Provide appropriate ventilation when the product is applied in indoor or poorly ventilated environments.
- 7.3. **PRECAUTIONS FOR USE**  
Membrane applications should follow the "Technical instructions" provided by the manufacturer, [according to the principles of good technique and Safety \(point 8,16\)](#). In case of indoor or poorly ventilated applications, use the Personal Protective Equipment (Point 8). Avoid open flames.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1. **EXPOSURE CONTROLS**  
Open flame operations involved in installing bitumen-polymer waterproofing membranes may generate the dispersion of potentially hazardous substances, among which polycyclic aromatic compounds.  
  
Provide appropriate ventilation when the product is applied in indoor or poorly ventilated environments (Point 2) in order to keep the exposure levels below the required limits (T.L.V.- ACGIH).
- 8.2. **PERSONAL PROTECTIVE EQUIPMENT**  
During product applications, the following personal protective equipment is recommended:  
- Skin protection: protective gloves; long sleeve shirt, trousers, safety shoes.  
- Eye protection: safety glasses  
  
In case of indoor or poorly ventilated indoor applications provide appropriate ventilation (Point 8.1). In case of inadequate ventilation system, use a respiratory protection equipment. The use of particulate filter respirators against solid & liquid particles is recommended (P3 protection).
- 8.3. **HYGIENIST MEASURES**  
- Wash hands before every break and after the work shift.  
- Keep work clothes separate from the other clothing



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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

- PHYSICAL FORM	Membrane rolls
- ODOUR	slight bitumen odor
- pH	not applicable
- BOILING POINT/RANGE	> +470°C ca. (bitumen)
- MELTING POINT/RANGE	> +100°C
- FLASH POINT	> +230°C ca. (bitumen)
- INFIAMMABILITY(solid, gas)	Calorific value 9.000 kcal/kg ca.
- AUTOIGNITION TEMPERATURE	> +485°C ca. (bitumen)
- EXPLOSIVE PROPERTIES	NO
- OXIDIZING PROPERTIES	NO
- VAPOUR PRESSURE	not applicable
- DENSITY	1÷1,5 kg/dm <sup>3</sup>
- SOLUBILITY IN WATER	NO
- LIPID SOLUBILITY	YES (organic solvents; oils)

#### 10. STABILITY AND REACTIVITY

- 10.1 STABILITY The product is stable and is not considered to be reactive under normal temperature and pressure.
- 10.2 REACTIVITY The product is chemically inert.
- 10.3 INCOMPATIBLE MATERIALS Avoid contacts with oxidizing agents, especially under high temperatures, because the product may have exothermic reactions.



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#### 11. TOXICOLOGICAL INFORMATION

11.1 THE PRODUCT The product consists in a mixture of distilled bitumen and polyolefin and/or elastomer polymers and reinforcement .  
The product does not contain coal tar and asbestos.  
The product is not classified as hazardous.

#### 11.2 INFORMATION ON TOXICOLOGICAL EFFECTS

The product may be applied in adhesive cold or heat welded. Open flame operations involved in installing bitumen-polymer waterproofing membranes may generate the dispersion of potentially hazardous substances, among which polycyclic aromatic compounds.

The exposure levels to these substances are widely below the normative limits for IPA fumes in metropolitan areas (Source: Bertazzi PA, FOA' V., Fustinoni S., see section 16)

Acute health hazards:

- eye irritation
- skin irritation
- nose and throat irritation

Repeated long-term exposure needs regular medical examination, in accordance with national regulation (D.L. 25/2002 and D.Lgs 81/2008 and subsequent modifications)

The product should be applied in accordance with the rules of hygiene, safety and good industrial practice, according to the technical instructions provided by the manufacturer..

#### 12. ECOLOGICAL INFORMATION

The product must be stored and used in accordance with the rules of hygiene, safety and good industrial practice, according to the technical guidance provided by the manufacturer (Point 7)

Dispose of this product according to national regulations, in order to avoid environmental pollution (Point 13).

#### 13. DISPOSAL CONSIDERATIONS

Dispose of the product in landfill.

The product is classified as non hazardous special waste in accordance with national regulations (D.Lgs 152/2006 and subsequent modifications)

#### 14. TRANSPORT INFORMATION

No special transportation or shipping requirements.



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#### 15. REGULATORY INFORMATION

- 15.1 LABEL: no labelling required  
R- Phrases: not applicable (or hazard statements)  
S- Phrases: not applicable (or precautionary statements)
- 15.2 EUROPEAN REGULATION: Directive 67/548/CEE, Directive 1999/45/CE, Directive 91/155/CEE and subsequent modifications and integrations)  
Directive 92/32/CEE, Directive 93/67/CEE Regulation 793/93, Regulation 1488/94, Directive 98/24/CE, Directive 2001/60/CE, Directive 2004/73/CEE, Regulation (CE) n. 1907/2006 (REACH), Directive 2008/98/CE.
- 15.3 ITALIAN REGULATION: D.Lgs. 14 marzo 2003, n. 65; DPR 9 giugno 1975 n. 482, , DPR 13 aprile 1994, n. 336, D.Lgs. 2 febbraio 2002 n. 25, D.Lgs. 3 febbraio 1997 n. 52; D.Lgs n° 285/98; D.lgs 152/2006, D.Lgs. n. 81/2008; D.lgs. n. 106/2009 and subsequent modifications.

This safety Information data sheet includes the following 16 headings in accordance with Annex II of COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

#### 16. OTHER INFORMATION

- 16.1 Check of application temperature
- CORRECT TEMPERATURE: when using hot air or flame , the correct application temperature is showed by
    - a complete retraction of fusible surfacing film;
    - blackening of talc/mineral finishing and polished surface.
- In any case, the application is correct when a part of molten stream comes out from overlapped sheets. The maximum size of this part of stream has to be 1÷2 cm.
- FLAME COLOUR: During the application of the product, the colour of the flame has to be blue. If the colour of the flame is reddish it means that too much heat has been reached: this is not a correct and good practice.
  - THERMOMETER USE: in case of application with molten bitumen, the temperature of the tank can be checked by a thermometer.
  - OPEN FLAMES: avoid open flames in order to avoid risks of fire; keep fire extinguish media available.



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#### 16.2 Main sources used to edit this safety data sheet:

- Istituto Superiore di Sanità – Prot. 30189/TOA6 del 10 ottobre 1997 “Classificazione di pericolosità del bitume e del catrame”
- NIOSH Registry of toxic effects of chemical substances SAX Dangerous Properties of industrial materials.
- Bertazzi P.A., Foà V., Fustinoni S., “Esposizione professionale a idrocarburi policiclici aromatici durante la stesura bituminosa”, Università degli Studi di Milano, Dipartimento di Medicina del Lavoro, Milano, 2005.
- ACGIH: Threshold Limit Values (TLV) for chemical substances (2008).
- Atti del Convegno su Salute e sicurezza nelle opere di impermeabilizzazione con membrane bituminose, Albino 18 dicembre 2009)

The information contained herein is provided in the present state of our knowledge and may be subject to change and/or upgrades. The product must be stored and used in accordance with the rules of hygiene, safety and good industrial practice, according to the technical guidance provided by the manufacturer and in accordance with local and European regulations.