

Material Safety Data Sheet for NILOFLEX 15 PY Rolls of Polymer Modified Waterproofing Membranes

Introduction:

Releasing of a **M**aterial **S**afety **D**ata **S**heet helps in providing the information mentioned below, intended to ensure proper product use, by using the sixteen-point schedule.

- IDENTIFYING PARTICULARS OF THE ARTICLE AND OF THE MANUFACTURING COMPANY/FIRM:
 - 1.1 Product Name: NILOFLEX 15 PY
 - **1.2 Product Use:** Waterproofing and construction materials used to protect the structures against all types of water in all positions underground, wet areas, roofs, etc.
 - 1.3 Company Name: BITUNIL
 - 1.4 Address: 50 Al Khalifa Al Mamoun St. Roxy, Heliopolis, Cairo- Egypt
 - **1.5** Telephone Number / Fax: (02) 24511194 / 24511198.

2. COMPOSITION / INFORMATION OF INGREDIENTS:

Product made of modified bituminous waterproofing membrane consists of:

- **2.1** Waterproofing compound made of modified bitumen with SBS (Styrene Butadiene Styrene) rubber.
 - **2.2** Synthetic reinforcement in the middle is made of polyester non-woven fibers.
- **2.3** Surfacing is placed on one side with polyethylene thin film while on the other side similar film, fine sand or rock slates is placed.

3. HAZARDS IDENTIFICATION:

- **3.1** Material never catches fire unless it gets in direct contact with flame for several minutes.
- 3.2 Burning gases are non-toxic.
- **3.3** In case of fire, it is preferable not to use water; all other types of extinguishers are applicable.
- **3.4 Acute hazard:** Non-toxic if ingested.
- 3.5 Contact with skin: Safe

4. FIRST AID MEASURES:

4.1 In cases of anomalous <u>inhalation</u> of vapours during scorching, especially in confined spaces, the victim should be removed from the workplace. Help him to breathe in fresh air and consult a physician.

- 4.2 In cases where material in the molten state comes into contact with the <u>skin</u>, the latter should be flushed for a sustained period with cold water and do not try to remove the material from the skin.
- 4.3 Avoid using solvents to remove the material. Remove any contaminated clothing if this is not stuck to the skin and consult a physician.
- 4.4 In cases where the molten material comes into contact with the <u>eyes</u>, the latter must be rinsed immediately with plenty of cold water for at least 15 minutes. Make no attempt to remove particles of the substance and seek specialist medical attention.
- 4.5 In the case of irritation caused by fumes rinse eyes with plenty of cold water.
- 4.6 In cases of swallowing, seek immediate medical attention.

5. FIREFIGHTING MEASURES

In case of fire, extinguish with waterfog, carbon dioxide, dry powder, or foam. Do not use water jets. Use Up filter masks (for combined universal protection against smoke and combustion gas including CO2).

6. ACCIDENTAL RELEASE MEASURES

Not applicable

7. STORAGE AND APPLICATION

7.1 Storage

Keep the rolls in the upright position, protected from the sun (temperature ranging between 0°C and 40°C), and well away from heat sources and electrical plant

No measures are needed to prevent the build-up of static electricity.

Keep proper fire-extinguishing means available.

7.2 Application

Use proper protective clothing (see, point 8).

Avoid applying in confined spaces and/or where there is no proper ventilation (see point 8).

Follow the rules on health and safety at work laid down in existing legislation.

Keep proper fire-extinguishing means available.

During application the material in the molten state can cause scalding.

Use of a freely burning flame, if unguarded, may constitute a fire risk.

When flame or hot air are used for application purposes, the right heating temperature for sheathing with a thermo-melt film covering on their face(s) is indicated by the full retraction of the film. For sand-covered or talc-covered surfaces, the right temperature for surface adhesion is indicated by blackening and by the appearance of a shiny surface. The right application procedure is reported by a molten mix along the line where the sheets overlap. The molten mix should not be above 1-2 cm.

Further removal of make up have to be avoided because of possible damages to the mix and because it can produce useless emission of vapours. During the application the flame colour must be blue; a red flame indicates an excessive heating that must be avoided.

Where application involves use of molten bitumen, a thermometer will enable a check to be

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

kept on the temperature of the pot in which the bitumen is melted.

- 8.1 Recommended personal protection equipment:
- Hand protection : wear proper protective gloves.
- Eye protection : safety goggles and face mask.
- Skin protection : wear appropriate protective clothing.
- 8.2 The application of this product in building interiors must be carried out in enclosed areas where there is adequate extraction plant for the vapours generated during scorching operations. In case of building interiors with not sufficient ventilation wear a respiratory protective device in form of a mask with an AP filter (for protection against organic vapours, dust and fumes, spray painting, protection degree P3)

Exposure limits: TLV/TWA = 0,5 mg/m3 measured as benzene-extractable inhalable particulate. (Asphalt fumes).

8.3 Wash hands before work breaks and at the end of work.

Keep working clothes separate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: sheeting in rollsOdour: mildly bituminouspH: not applicable

- Boiling point/range: > +470 °C approx. (bitumen)

- Softening point/range: > +125 °C approx.

Flash point: > + 230° C approx. (bitumen)
 Flammability (solids, gas): calorific value 9000 kcal/kg approx.

- Self ignition: > +485°C approx. (bitumen)

Explosive properties: NOComburent properties: NO

- Vapour pressure: not applicable
- Density: 1 - 1.5 kg/dm3
- Solubility: Water solubility NO

Lipid solubility YES (organic solvents, oils)

10. STABILITY AND REACTIVITY

Not applicable

11. TOXICOLOGICAL INFORMATION

The product is based on bitumen and thermoplastic polymers.

As such, it constitutes no type of danger.

When molten, the compound or the added bitumen can cause scalding.

Improper use during the application of the product, without regard for the precautions listed in points 7 and 8, may result in irritation to the eyes, respiratory tract, and to the skin, and sensitisation with possible dermatitis and conjunctivitis.

In accordance with the Legislative Decree 25/2002 health check-ups are required for workers using this product.

The waterproofing operations of surfaces with bituminous sheet torch applied imply a modest dispersion of airborne polycyclic aromatic hydrocarbons (PAH). The measured environmental concentrations of PAH are, on average, three orders of magnitude lower than the occupational limit values established or recommended by associations and agencies for health and safety at work. The environmental levels measured are not far from the environmental concentrations of PAH found in urban areas.

12. ENVIRONMENTAL CONSIDERATIONS

Avoid release into the environment by adopting sound working practices.

13. DISPOSAL CONSIDERATIONS

13.1 The product is not dangerous

13.2 The product is not to be disposed of other than through sending to an authorized dump.

14. TRANSPORT INFORMATION

No hazards are associated with transportation of the product.

15. REGULATORY INFORMATION

EU: directives 67/548/EEC of 27th June 1967, 1999/45/EC of 31st of May 1999, 91/155/EEC of 5th March 1991, and subsequent amendments and additions to them.

16. OTHER INFORMATION

The information contained in this data sheet is provided subject to our current state of knowledge, carries no warranty status, and may undergo revision. The product must be stored and used in accordance with health and safety regulations and good industrial practice, and in compliance with the supplier's technical instructions and statutory provisions.