info safety data sheet



reinforced bitumen sheet 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.

The product covered by this document is not subject of issuance of INFO 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.

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1.0---PRODUCT AND PRODUCER IDENTIFICATION

 1.1---Product Identifier
 : waterproofing membrane - relevant use : waterproofing applications

 1.2---Manufacturer
 : Vetroasfalto SpA

- 1.2---Manufacturer 1.3---Address
- 1.4---Emergency
- : Via Pascoli, 3 20060 Basiano (MI) Italy
- : tel +39.02.959831 fax +39.02.95983555
- : mail vetroasfalto@vetroasfalto.com

2.0---HAZARD IDENTIFICATION

2.1---Classification : the product is not classified as hazardous in accordance with the national regulation (D.Lgs. n° 65/03)

2.2---Health risk : acute nose and throat irritation are possible during the heat treatment and application of the product, especially in indoor areas, 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

3.0---COMPOSITION-INFORMATION ON INGREDIENTS

3.1---Composition : the product consists in a mixture of penetration grade bitumen and polyolefin and/or elastomer polymers and reinforcement, 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)

4.0---FIRST AID MEASURES

4.1---Inhalation : in case of long-term inhalation of fumes, particularly in indoor areas, 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 concact : 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

5.0---FIREFIGHTING MEASURES

5.1---Extinguishing media : CO2, 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

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6.0---ACCIDENTAL RELEASE MEASURES not applicable

7.0---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 areas

7.3---Precautions for use : membrane applications should follow the "Technical instructions" provided by the manufacturer. In case of indoor applications, use the Personal Protective Equipment (Point 8). Avoid open flames. 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 sheet 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 they can produce useless emission of vapours. During the application involves use of molten bitumen, a thermometer will enable a check to be kept on the temperature of the pot in which the bitumen is melted



8.0---EXPOSURE CONTROL AND PERSONAL PROTECTION

8.1---Esposure controls : normally the product doesn't generate hazardous substances. 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 areas (Point 2) in order to keep the exposure levels below the required limits (T.L.V-ACGIH)

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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 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---Hygienistic measures :

-Wash hands before every break and after the work shift

-Keep work clothes separate from the other clothing









9.0---PHYSICAL AND CHEMICAL PROPERTIES

Phisical form / Odour : pH : Boilig Point / Range : Melting Point / Range : Punto di Infiammabilità : Flash Point (Solid, Gas) : Autoignition : Explosive and Oxidizing Properties : Vapour Pressure / Density : Solubility in Water : Lipid Solubility : membrane rolls / slight bitumen odour not applicable +470 °C ca (bitumen) > +100 °C +230 °C approx (bitumen) calorific value = 9.000 kcal/kg approx +485 °C approx (bitumen) No / No not applicable / 1÷1,5 kg/dm³ No Yes (organic solvents - oils)

10.0---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 esothermal reactions

11.0---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 toxilogical 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 DLgs 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

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12.0---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)

13.0---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)

14.0---TRANSPORT INFORMATION

No special trasportation or shipping requirements

15.0---REGULATORY INFORMATIONLABEL

15.1---Label : no labelling required - R-Phrases : not applicable - S-Phrases : not applicable

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, Regulation1488/94, 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, D.Lgs. 5 febbraio 1997 n. 22, 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; Dlgs 152/2006, D.Lgs. n. 81/2008; D.lgs. n. 106/2009 and subsequent modifications

n.b : This INFO SAFETY 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, Authorisation and Restriction of Chemicals (REACH)

16.0---OTHER INFORMATION

16.1---Check of application temperature

Correct temperature : using hot air or flame, the correct application temperature is showed by :

01---a complete retraction of fusible surfacing film

02---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

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 policlinici 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)

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TECHNICAL INSTRUCTIONS FOR THE APPLICATION OF FLEXIBLE BITUMEN SHEETS FOR WATERPROOFING

THE NECESSARY EQUIPMENT



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

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