

**SAFETY DATA SHEET** according to 91/155/CEE**POLYFLEX LM**

**Reference** : 4.11  
**Date** : 30/07/2002  
**Revision** : 004

**1. IDENTIFICATION OF THE PREPARATION AND COMPANY**

**Product name** : POLYFLEX LM  
**Intended use** : Polyurethane sealant  
**Name and full address of company** : DEN BRAVEN FRANCE s.a.r.l. – ZI Le Meux – 60881 Le Meux Cedex  
**Telephone** : Tel + 33 (0) 3 44 91 68 68 Fax : + 33 (0) 3 44 91 68 95  
**Emergency telephone number** : INRS : + 33 (0) 1.45.42.59.59

**2. COMPOSITION / INFORMATIONS ON INGREDIENTS**

<b>Dangerous ingredients</b>	<b>CAS Number</b>	<b>% - Weight</b>	<b>Symbols</b>	<b>R Phrases</b>
Calcium oxide	1305-78-8	1-2.5 %	Xi	37/38 -41
Solvent naphta light aromatic	64742-95-6	2.5-10 %	Xn	10-37-51/53-65-66
Diphenylmethane 4.4' diisocyanate	101-68-8	<1%	Xn	20-36/37/38 -42/43

**3. HAZARDS IDENTIFICATION**

**Hazards for health** : Xn : May cause sensitization by inhalation.  
**Hazard for environment** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**4. FIRST AID MEASURES**

**General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.  
**Eye contact** : Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.  
**Ingestion** : If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.  
**Inhalation** : Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.  
**Skin contact** : Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

**5. FIRE FIGHTING MEASURES**

**recommended extinguishing media** : Water spray, CO<sub>2</sub>, powders, foam  
**Not to be used** : Waterjet.  
**Particularities** : Use an appropriate breathing apparatus. Cool closed containers exposed to fire with water.

**6. ACCIDENTAL RELEASE MEASURES**

**Environmental precautions** : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.  
**Clean up procedure** : Collect mechanically the preparation and place in container. One possible decontaminant comprises : Water/Ethanol or IPA/Ammonia solution (45/50/5 by volume)  
**Personal precautions** : Wear an appropriate equipment as described in § 8.

**7. HANDLING AND STORAGE**

**Handling** : Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used. Avoid skin and eye contact and the inhalation of vapours. Comply with the health and safety at work laws.  
**Storage** : Store in a dry, well ventilated area, between +5 and +25°C and place away from sources of heat and direct sunlight. Keep away from oxidising agent, from strongly acid materials as well as amines, alcohol and water. No smoking . Prevent unauthorised access . Containers which are opened must be carefully resealed.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure limits**

Names	VME (8h/j)		VLE (15min)	
	ppm	mg/m3	ppm	mg/m3
Solvent naphta light aromatic	50	254		
Diphenylmethane 4.4' diisocyanate	0.01	0.1	0.02	0.2

**Respiratory protection** : Do not inhale vapours. Provide adequate ventilation with a good general extraction.

**Eye and skin protection** : Avoid skin/eye contact. Use safety eyewear, polyvinyl gloves and closed protective clothing  
**Protection during working** : Smoking, eating, drinking are prohibited in application area. Wash the hands after working  
Do not touch eyes with dirty hands.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	: Paste	<b>Flash point</b>	: >55 °C
<b>Colour</b>	: White , Grey , Black ...	<b>Solubility in water</b>	: No ; reaction
<b>Odour</b>	:	<b>Solubility in organic solvents</b>	: Partly
<b>Density</b>	: 1.15 à 1.19 g/l	<b>VOC contents</b>	: 7 to 8 % weight

## 10. STABILITY AND REACTIVITY

The preparation is stable under recommended storage and handling conditions (see § 7).

**Hazardous decomposition products** : During polymerisation : CO<sub>2</sub> , which in closed containers can result in pressurisation.  
In case of fire : isocyanates, carbon monoxide and dioxide, smoke, nitrogen oxide, hydrogen chloride, hydrogen cyanide, sulfur dioxide.

## 11. TOXICOLOGICAL INFORMATION

**Information product** Based on the properties of the isocyanate components, this preparation may cause acute irritation and sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Repeated or prolonged contact with the preparation may cause non-allergic contact dermatitis and absorption through the skin. The paste splashed in the eyes may cause irritation and reversible damage.

### Diphenylmethane 4,4' diisocyanate

**Acute oral LD50 rat (mg/kg)** >15000

**Acute dermal LD50 rabbit (mg/kg)**

**Acute inhalation LC50 rat (mg/l/4h)** 0,49

## 12. ECOLOGICAL INFORMATION

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive (1999/45/EC) and classified for ecotoxicological hazards accordingly. See Chapters 2 and 15 for details. The product should not be allowed to enter drains or water courses.

## 13. DISPOSAL INFORMATION

In accordance with federal, national and local legislation.

**Disposal code** : 080409

## 14. TRANSPORT INFORMATION

Transport only in accordance with ADR for road, RID for rail, IMDG for sea and IACO/IATA for air transport. Exempted of transport classification.

## 15. REGULATORY INFORMATION

In accordance with 67/548/CE et 99/45/CE :

**Danger classification** : Xn Harmful

**Contain** : Diphenylmethane 4,4' diisocyanate

**Phrase R** : R42 : May cause sensitization by inhalation.

R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Phrase S** : S2 : Keep out of the reach of children.

S23 : Do not breathe vapours.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S46 : If swallowed, seek medical advice immediately and show this container or label.

S63 : In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Contains isocyanates – See information supplied by the manufacturer. This information is supplied in the present safety data sheet.

## 16. OTHERS INFORMATIONS

**Professional table** : n°4 bis ; 62 ; 84

**Text of R phrases in §2** : 10 : Flammable

20 : Harmful by inhalation.

36/37/38 : Irritating to eyes, respiratory system and skin.

41 : Risk of serious damage to eyes.

42/43 : May cause sensitization by inhalation and skin contact.

51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

65 : Harmful: may cause lung damage if swallowed..

66 : Repeated exposure may cause skin dryness or cracking

**Modified sections in this revision** : Presentation, 2 , 9,15

The information of this SDS is based on the present state of our knowledge and on current EU and national laws. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this SDS is meant as a description of the safety requirements of our product : it is not to be considered as a guarantee of the products properties.

**I = Unknown**

**PA = Not concerned**

**SF = Secret of process**