



**VHDRS®**  
Very  
High  
Durability  
Repair & Prevention  
System



Certified Quality System since **FEBRUARY 1993**

*From Project to Jobsite*

## TECNOSEAL PLV MONO

### ONE-COMPONENT POLYURETHANE THIXOTROPIC SEALANT AT LOW ELASTICITY MODULUS

**CE** approved EN 15651-1: 2012-12 e EN 15651-4: 2012-12

**Description** One-component polyurethane sealant for vertical application, at low elasticity modulus.

#### **Advantages and characteristics**

- One-component, ready to use
- Rapid polymerization
- High elasticity
- Does not stick and does not keep dust or dirt.
- Easy workability
- Thixotropic
- Good UV resistance
- Good adhesion to substrates in concrete, renders, metal, wood, stone, bitumen, etc.
- Optimal resistance against atmosphere.
- Optimal resistance against chemical substances, such as diluted bases, diesel fuel, kerosene, nafta, diluted acids, aromatic hydrocarbons, demoulding oils.

**Filed of use** For elastic sealing of industrial and civil joints having important movements and where atmospheric resistance is needed.

#### **Method of use** **Preparation of the substrate**

The substrate must be clean and sound. Remove all dirt and incoherent parts manually or mechanically, and remove dust by compressed air. Clean with sandblasting or water-jetting in the case the substrate is contaminated with greases, demoulding oils etc.

In the case the substrate has to be prepared previously, use BS 38 MuCis® two-components. Consult of Technical department for more details or technical problems.

It is recommended to use the primer TECNOFIX EP 40. The product has the action of consolidation and waterproofing of dusted concrete surfaces.

Surfaces not suitable for the TECNOFIX EP 40 are metals such as steel, aluminum, copper or brass, and previously painted surfaces. The application of the sealant should be done not before 6 hours, the time required for the drying of the primer, and not later than 24 hours after application of TECNOFIX EP 40. In the case of very porous surfaces, apply two coats of TECNOFIX EP 40 for stronger consolidation of the substrate. Before application of the sealant the installation in the bottom of the joint of a suited expanded or extruded material of proper dimensions is required. Position it in a manner that its top edge is at a depth equal to half of the width of the joint if this joint width is higher than 1 cm, or at a depth equal to the measure of the width of the joint if this is equal to or less than 1cm. This operation is not necessary when the sealant, besides the two sides of the joint, has no contact with a third rigid wall.

#### **Application method**

The application of the product can be done by proper gun for aluminium bags.

Date edition : 02/2010  
Date revision : 11/2014

Nr. rev.: 5

TECNOSEAL PLV MONO  
pag. 1/3



**VHDRS®**  
 Very  
 High  
 Durability  
 Repair & Prevention  
 System



Certified Quality System since **FEBRUARY 1993**

## *From Project to Jobsite*

- Remarks**
- Do not apply at temperatures below + 5°C.
  - The substrate to which the product shall be applied shall always have a temperature of 2°C higher than the dew-point in the conditions of application (to avoid condensation which can decrease adhesion).
  - Assure yourself before starting the application that the substrate is completely dry.
  - Read carefully the instructions on the labels on packaging and eventually ask for the Material Safety Data Sheet.
  - Drying process (at +20°C and 65 % R.H.): after 3-4 days from the application, the product has sufficient elastic characteristics to support the joint movements without any permanent deformation and to grant waterproofing.
  - Low temperatures slow down the drying process

**Packaging/ Colours** Bags aluminium/polythene of 600 ml in boxes of 20 pieces  
 Grey and white on request

**Storage** 12 months in the original and closed packaging, in dry and protected area between + 5°C and + 25°C. The stocking temperature must not exceed 25°C for long time. Keep away from heat.

**Technical characteristics (typical values)**

- |   |                                      |
|---|--------------------------------------|
| • Chemical nature                           | Polyurethane                         |
| • Way of hardening                          | It reacts with humidity              |
| • Specific weight                           | 1,40 ± 0,02 Kg/dm <sup>3</sup>       |
| • Viscosity                                 | Thyrotrophic paste                   |
| • Superficial dry film at 23°C and 50% r.h. | ± 120 minutes                        |
| • Hardening speed (23°C and 50% u.r.)       | ≥ 2 mm/24h                           |
| • Hardness Shore A (DIN 53505)              | ± 20                                 |
| • Elongation to break (DIN 53504)           | ≥ 600%                               |
| • Tensile strength at break (DIN 53504)     | Approx 1,5 N/mm <sup>2</sup>         |
| • Elasticity modulus at 100% (DIN 52455)    | ≥ 0,4 N/mm <sup>2</sup>              |
| • Elastic recovery (DIN 52458)              | ≥ 85%                                |
| • Practical movement accommodation          | ± 25% of the total movement capacity |
| • Temperature of application                | from + 5°C to + 35°C                 |
| • Temperature resistance                    | -40°C/+80°C                          |



**VHDRS®**  
 Very  
 High  
 Durability  
 Repair & Prevention  
 System



Certified Quality System since **FEBRUARY 1993**

## *From Project to Jobsite*

PERFORMANCE CHARACTERISTICS	TYPICAL VALUE	STANDARDS
Fire reaction class	Class E	EN 15651-1: 2012-12 EN 15651-4: 2012-12
Release of hazardous substances	NPD	
Tightness to water and air		
a) sagging	≤ 3 mm	
b) loss of volume	≤ 10%	
c) tensile properties with maintaining in extension after immersion in water	No rupture	
d) tensile properties with maintaining in extension	No rupture	
e) tensile properties with maintenance in extension to - 30 °C	No rupture	
f) tensile properties (secant modulus) at 23 °C	≤ 0,4 N/mm <sup>2</sup>	
g) tensile properties (secant modulus) at - 20 °C	≤ 0,6 N/mm <sup>2</sup>	
h) tensile properties (secant modulus) at - 30 °C	≤ 0,9 N/mm <sup>2</sup>	
i) adhesive / cohesive properties maintained in extension after 28 days water immersion	No rupture	
j) adhesive / cohesive properties maintained in extension after 28 days in salt immersion	No rupture	
k) tear strength	No rupture	
l) durability	Passes	

**Safety** Read carefully the safety indications on the packaging, or consult the relevant Material **indications** Safety Datasheet of this product.

The above information is based on our best experiences and lab results and on results of the application of the product in various fields. Tecnochem Italiana is not responsible for negative performances due to not proper use of the product or for defects due to elements not connected with the quality of the product included wrong storage. Technical characteristic in this technical data sheet are up-to-dated periodically .Revision date of this technical data sheet is indicated below

Date edition : 02/2010  
 Date revision : 11/2014

Nr. rev.: 5

TECNOSEAL PLV MONO  
 pag. 3/3