

# KÖSTER® PU-Flex 25

## Elastic, one component, low modulus polyurethane sealant

## **Product Description:**

KÖSTER PU-Flex 25 is an highly elastic, low modulus polyurethane sealant, with good UV resistance and excellent adhesion even to substrates that are considered problematic substrates for sealants like glass, aluminium, steel and polycarbonate.

KÖSTER PU-Flex 25 is single component and cures with air moisture to form a flexible sealant which can be overpainted after curing.

The sealant is non sagging, highly thixotropic, easy smoothing and has good workability.



#### **Colours:**

Grey and white

#### **Applications:**

The KÖSTER PU-Flex 25 is designed for civil and industrial movement, expansion, control and dilatation joints in architectural and heavy construction.

To be used as a sealant between concrete, mortar, brickwork, natural and synthetic stone, metal, steel, aluminium, wood, ceramic tiles, rigid plastics etc.

Suitable for water depots and swimming pools and chemically treated water.

## **Technical Data:**

#### **Properties Prior to Curing:**

| Chemical basis                     | Polyurethane             |
|------------------------------------|--------------------------|
| Odour                              | Characteristic           |
| Density                            | 1,50 g / cm <sup>3</sup> |
| Viscosity                          | Non sag                  |
| Inflammability point               | > +60°C                  |
| Freezing point                     | < - 10 <sup>0</sup> C    |
| Curing speed at 25 °C and 50 % R.H | 2mm after 24 hrs         |
| Skin formation                     | apr. 3 hours             |

## **Properties of Cured Product:**

| Hardness Shore - A               | 25                      |
|----------------------------------|-------------------------|
| Tensile strength                 | 1,2 N / mm <sup>2</sup> |
| Elongation at break (DIN 53 504) | > % 600                 |
| <u>E - Modulus (DIN 52 455)</u>  | 0,25 MPa                |
| Recovery from deformation        | % 90                    |
| Admissable joint movement        | ± % 35                  |
| Application temperature          | +5°C to +35°C           |
| Temperature resistance           | - 30°C to +80°C         |

#### **Instructions:**

**Job conditions** – Air and substrate temperatures must be  $+5^{\circ}$ C or higher and must remains so for a minimum of 24 hours.

**Surfaces -** All surfaces must be perfectly clean, dry and free from dust and grease. Where necessary apply a coating of primer on the joint walls. Use KÖSTER PU Primer 110 for porous (absorbing) surfaces like concrete, mortar etc. and KÖSTER PU Primer 120 for non-porous (non-absorbing) surfaces like glazed tiles, rigid plastics and aluminium.

**Joint design -** The sealant should not adhere to the joint bottom; the use of a joint



T704 / 1113.FNG

backing rod is recommended. Use only closed cell, sealant compatible foam backer rods made out of PE. It is advisable to do preliminary adhesion tests. If the joint has a concrete protective system the compatibility of the joint coating with the sealant has to be verified.

Up to 10mm joint width : select the same joint depth (for example :  $5mm \times 5mm$  or  $7mm \times 7mm$ ).

For joints that have a greater width than 10 mm use a ratio of 2:1 (width:depth, for example  $20 \text{mm} \times 10 \text{mm}$ ) but the minimum depth should be 10 mm.

In the case of concrete cracks, the cracks should be routed open with a angle grinder and must be cleaned free of dust before the application of sealant (if necessary, KÖSTER Primer 110 must be used).

**Application** – Application of KÖSTER PU-Flex 25 is carried out by a suitable pres-out gun.

#### **Consumption:**

| KÖSTER PU-Flex 25 | 1,50 gr / cm <sup>3</sup> |
|-------------------|---------------------------|
| for example ;     |                           |
| 5 mm x 5 mm       | 24mt per foilbag          |
| 10 mm x 10 mm     | 12mt per foilbag          |
| 15 mm x 15 mm     | 4mt ner foilhag           |

#### **Packaging:**

| 600 ml foilbags | 20 foilbags / box |
|-----------------|-------------------|
|                 |                   |



### **Cleaning of Tools:**

Clean tools with polyurethane solvent after use. Do not allow material to cure in tools.

#### **Notes:**

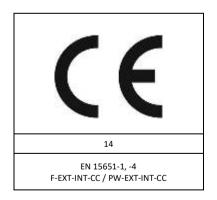
- Do not apply below +5°C or if tem peratures below +5°C are expected within 24 hours.
- Do not apply on wet or frozen surfaces
- Do not apply on dusting or weak surfaces. If in doubt, perform adhesion test.
- Cold temperatures lengthen and hot temperatures shorten curing time of material.

#### Storage and Shelf life:

KÖSTER PU-Flex 25 must be stored in original containers and under dry condition at  $+5^{\circ}$ C to  $+25^{\circ}$ C. Under these conditions shelf life is 12 month.

#### **Caution:**

Contains isocyanates. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye / face protection. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Material Safety Data Sheet.



#### **Standarts:**

ISO 11600, class F - 25 LM EN 15651-1:2012 F-EXT-INT-CC EN 15651-4:2012 PW-EXT-INT-CC