# Flexseal PU425



One component, non sag, elastomeric polyurethane sealant with high tear and weather resistance

### **DESCRIPTION**

Flexseal PU425 is a one component non sag polyurethane sealant that cures by reacting with air humidity to form a tough and highly elastic low modulus sealant. Flexseal PU425 has a very wide service temperature range. Suitable for vertical and horizontal joints.

#### **APPLICATIONS**

- » General sealing of construction and expansion joints.
- » Basement walls.
- » Precast concrete elements.
- » For concrete, wood, marble, stone, aluminum, steel, ceramic, gypsum boards, etc.

## **ADVANTAGES**

- » Very easy and economical to use.
- » One component.
- » Excellent ageing resistance.
- » Paintable, consult DCP's Technical Department for more details.
- » Remains elastic at temperatures down to -30°C.
- Sood resistance to microorganisms and a variety of chemicals
- Sood adhesion to most surfaces without the need for priming.
- » Excellent water resistance.

#### **STANDARDS**

Flexseal PU425 complies with:

- » ISO 11600, Type F, Class 25 LM.
- » ASTM C920, Type S, Grade NS, Class 25, Use NT, T, A, M and I.

#### **METHOD OF USE**

#### **SURFACE PREPARATION**

All substrates should be clean, dry, free from dust, oil, grease and any contaminations that could effect the adhesion.

If the substrates need to be cleaned, use methyl ethyl ketone (MEK), acetone or grease remover. Always be sure that the substrates are dry before the application.

## **TECHNICAL PROPERTIES:**

Colour: Various

Density:  $1.18 \pm 0.04 \text{ g/cm}^3$ 

Shore A hardness: 25 ± 5 @ 7 days

Service temperature: -30 up to 90°C

Application 5 up to 50°C temperature:

Adhesion in peel: ASTM C794 ≥ 110 N

Tack free time: 1:00 to 3:30 hr @ 23°C &

ASTM C679 50% RH

Curing rate: ≈ 2.5 - 3.5 mm/day

Elongation at break: ≥ 800% @ 7 days

Tensile strength: ASTM D412 ≥ 1.8 MPa @ 7 days

Modulus @ 60%: ≤ 0.25 MPa @ 23°C (LM) ISO 8339 ≤ 0.60 MPa @ -20°C (LM)

Effects of accelerated

weathering: No cracking

ASTM C793

Effect of heat aging: Pass @ 70°C

ASTM C1246

accommodation: ± 25%

ASTM C719

Movement

VOC: ≤ 75 g/ltr

ASTM D2369 (comply with LEED)

### **PRIMING**

- Flexseal PU425 generally has strong adhesion to common clean, dry and sound substrates without primers. However, Flexprime Universal can be used on porous and non-porous surfaces in order to achieve optimum adhesion strength. For joints which will be continuously submerged in water, Flexprime Universal should be used.
- Using a small brush apply one thin coat at the joint sides and avoid over priming. Apply Flexseal PU425 sealant while the primer is still tacky to achieve optimum adhesion strength.



Sulay, Industrial Area, Istanbul St., Riyadh Industrial City 3, Jeddah Saudi Arabia info.saudi@dcp-int.com www.dcp-int.com





Alternatively, for porous substrates and joints which will be continuously submerged in water, Flexprime PS100 Primer can be used. It is not recommended to use Flexprime PS100 for non-porous substrates. Mix the two components of Flexprime PS100 and apply using small brush. Apply Flexseal PU425 within 10 -30 minutes from the application of Flexprime PS100 at 23°C.

## **APPLICATION**

The recommended application temperature range is  $5^{\circ}$ C to  $50^{\circ}$ C.

For cold weather application, store the product in a heated area at 20°C for 24 hours prior to use. Install polyethylene joint backing rod to control the sealant depth.

Tooling and finishing should be carried out immediately after the application of the sealant. For optimum performance, the ratio of width to depth of the sealant should be 2:1. Minimum sealant depth should however be 5 mm.

## **LIMITATIONS**

- » Not recommended for unsound substrates.
- » Although Flexseal PU425 is generally paintable, it is advisable test for the specific paint for compatibility.
- » Long exposure to UV, will reduce surface gloss, but will not affect sealant performance.

## **CLEANING**

Clean tools and equipment first with paper towels and then wipe with Acetone, xylene or other suitable solvents.

## **PACKAGING**

Flexseal PU425 is available in 600 ml sausages. 300 ml sausages and 300 ml cartridges are available on request.

# **CONSUMPTION IN JOINTS**

(Linear metre per 600 ml sausage)

Width Depth	5 mm	10 mm	15 mm	20 mm	25 mm	35 mm
5 mm	22	11				
7.5 mm			4.9	3.4		
10 mm				2.8	2.2	
15 mm					1.5	1.0

## DCP Saudi Co.

Sulay, Industrial Area, Istanbul St., Riyadh Industrial City 3, Jeddah Saudi Arabia info.saudi@dcp-int.com www.dcp-int.com

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#### **STORAGE**

Flexseal PU425 should be stored in original unopened packages at temperature of 5°C - 25°C in a dry place.

## SHELF LIFE

Flexseal PU425 has a shelf life of 8 months from date of manufacture if stored under the recommended conditions. Storing the material at temperatures higher than 25°C will shorten the shelf life of the product.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

#### **CAUTIONS**

## **HEALTH AND SAFETY**

If Flexseal PU425 comes into contact with the eyes, flush with copious amounts of cold water and obtain medical attention.

Product is non-hazardous once cured.

For further information refer to the Safety Data sheet.

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- » Concrete admixtures.
- » Surface treatments
- Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.



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