

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.
- » Good resistance to microorganisms and a variety of chemicals.
- » Good adhesion to most surfaces without the need for priming.
- » Excellent water resistance.
- » Maintains its performance under UV and weathering conditions.

STANDARDS

Flexseal PU425 complies with:

- » ISO 11600, Type F, Class 25 LM.
- » ASTM C920, Type S, Grade NS, Class 25, Use NT, T₁, 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 ± 0.04 g/cm ³
Shore A hardness: ASTM C661	23 ± 5 @ 7 days
Service temperature:	-30 up to 90°C
Application temperature:	5 up to 50°C
Adhesion in peel: ASTM C794	≥ 110 N
Tack free time: ASTM C679	1:00 to 3:30 hr @ 23°C & 50% RH
Curing rate:	≈ 2.5 - 3.5 mm/day
Elongation at break: ASTM D412	≥ 800% @ 7 days
Tensile strength: ASTM D412	≥ 1.8 MPa @ 7 days
Modulus @ 60%: ISO 8339	≤ 0.25 MPa @ 23°C (LM) ≤ 0.60 MPa @ -20°C (LM)
Effects of accelerated weathering: ASTM C793	No cracking
Effect of heat aging: ASTM C1246	Pass @ 70°C
Movement accommodation: ASTM C719	± 25%

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.



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- » 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°C to 50°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

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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Note:

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