



PC-Sealant® PU 25

Single Component Polyurethane construction Sealant

PC-Sealant® PU 25 is a one component, gun-grade, Non-sag, moisture-cure polyurethane sealant designed to skin and cure rapidly. This high performance product is designed with outstanding UV resistance and long term durability.

FEATURES

- Paintable
- Single component & Convenient Packing
- Movement accommodation factor \pm 30% excellent adhesion without Printing.
- Highly resistant to sea water, diluted acids and alkalis.
- odour less UV Resistant/ Fast Curing.
- Low VOC Stable@temp-40°C to 200°C.

ADVANTAGES

- Accommodates 30% joint movement.
- Permanently flexible, excellent weather ability.
- Easy to gun – Easy to tool.
- Cures to a tough, durable, elastic consistency with excellent cut and tear resistance.
- Paintable – non-sticky after cure.

PACKAGING

600ml sausage, 20 sausages per carton

EXPANSION JOINT DESIGN

PC-Sealant® PU 25 is suitable for application in joints designed in compliance with established architectural and engineering standards. It is recommended that the joint width be a minimum of 4 times the expected movement, with a minimum width of 5mm.

When used in an expansion joint, the sealant depth (D) should match the joint width (W) for joints less than 10mm wide. For wider joints, the width-to-depth ratio should be maintained at 2:1.

PC-Sealant® PU 25 can be applied on joints with a maximum width of 25 mm.

YIELD

The formula presented serves as an approximate guideline for estimating the expected yield of PC-Sealant® PU 25 in a standard 600ml sausage.

$$L = 600 / (W \times D)$$

Where:

L = Length of sealant in meters obtained per cartridge.

D = Depth of the joint in millimeters.

W = Width of the joint in millimeters.

Meter per 600 ml

Joint Depth(mm)	Joint Width(mm)					
6	6	10	12	15	20	25
6	16.6					
8		7.5	6.2	5		
10		6	5	4	3	
2					2.5	1.9
15						1.6

USES

- Sealant is designed to seal construction joints.
- To Seal Waterproof rivet seams and roof rails.
- To Seal Perimeter joints around windows and doors.
- Sealing corner moldings, fabricated roof-lap seams, bumper assemblies and body-to-cab joints in motor homes
- Sealing door hinges, skylights and portholes. Sealing Air conditioning equipment, flashing and gutters.

TECHNICAL DATA

Physical Properties	TEST METHOD	TYPICAL VALUE
Skin Over Time	-	>25 -35 mins
Tack Free Time	ASTM C-679-87	1 hours
Density	-	1.08±0,03 gm/ml
Shrinkage,%	--	<5
VOC, (g/L)	USEPA - 24	< 5
Flow (sag or slump)	ASTM C-639-01	Non Sag
Hardness : Shore A	ASTM D-2240-97	30±3
Movement Capability, %	ASTM C-719	±30
Peel Strength (N), concrete	ASTM C-794-93	>30
Tensile Strength (N/mm2)	ASTM D-412-98a	1.3
Elongation at break	ASTM D-412-98a	>300%
Effects of Accelerated Aging @ 300 hrs. UV exposure	ASTM C-793	No deterioration
Application Temperature (°C)		+5 to +40
Service Temperature (°C)		- 40 to 200
Elastic Hardness (A)	ASTM C661	>70%
Modulus of Elasticity (Mpa)	ASTM D412	0.35

COLOUR

White, Off-white, Grey, and Black. For other colour please contact local PC-WC representative.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Surfaces must be sound, clean, and dry. All release agents, dust, loose mortar, laitance, paints, or other loose particles must be removed. This can be accomplished with a thorough wire brushing, sanding, or solvent washing, depending on the contamination. PC-WC recommends that surface temperatures be below 40°C at the time the sealant is applied.

PRIMING

PC-Sealant® PU 25 typically adheres to common construction substrates without primers; however, due to the variability of substrate finishes available, where deemed necessary, use **PC-Seal Prime P**. A mockup or field adhesion test can be performed on the actual materials being used on the job to verify the need for a primer.

APPLICATION

PC-Sealant® PU 25 is easy to apply with conventional caulking equipment. Ensure that the backer rod is friction fitted properly. Mask the sides of the joint with tape prior to filling for a cleaner finish. Fill the joint completely with a proper width-to-depth ratio and tool to ensure intimate contact of sealant with joint walls. Dry tooling is always preferred, although xylene can be used in limited amounts to slick the spatula if needed following the initial dry tooling.

CLEAN UP

Excess sealant and smears adjacent to the joint interface can be carefully removed with xylene or mineral spirits before the sealant cures. Any utensils used for tooling can also be cleaned with xylene or mineral spirits.

FOR OPTIMUM PERFORMANCE

- In cool or cold weather, store container at room temperature for at least 24 hours before using.
- **PC-Sealant® PU 25** can adhere to other residual sealants in restoration applications. For best results always clean the joint as advised in the Surface Preparation section of this data guide. A product field adhesion test for **PC-Sealant® PU 25** within the specific application is always recommended to confirm adhesion and suitability of the application.
- When using **PC-Sealant® PU 25** in a traffic-bearing horizontal joint, use a firmer joint backing, such as neoprene rod or polyethylene foam block, and recess the surface of sealant (3mm - 6mm).
- Pursuant to accepted industry standards and practices, using rigid paints and/or coatings over flexible sealants can result in a loss of adhesion of the applied paint and/or coating, due to the potential movement of the sealant however, should painting and/or coating be desired it is required that the applicator of the paint and/or coating conduct on-site testing to determine compatibility and adhesion.

JOINT BACKING

A closed cell polyethylene backer rod is recommended as joint backing to control sealant depth and to ensure intimate contact of sealant with joint walls when tooling. Where the depth of the joint is insufficient for the use of the backer rod, an adhesive-backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at the time of sealant application.

LIMITATIONS

- Do not apply over damp or contaminated surfaces
- Do not use **PC-Sealant® PU 25** as a structural (load transferring) sealant.

STORAGE AND SHELF LIFE

PC-Sealant® PU 25 has a shelf life of 24 months when stored in tightly closed original casks, in a dry place at a temperature between +5°C and +25°C

CURING TIME

PC-Sealant® PU 25 generally cures at a rate of 2 mm per day at 25°C and 50% relative humidity. **PC-Sealant® PU 25** skin in 15-20 minutes and be tack-free in 1 hours. Lower temperatures and humidity will extend curing time.

HEALTH AND SAFETY

Use only with adequate ventilation. Prevent contact with skin, eyes, and clothing. Wash thoroughly after handling. Avoid breathing vapors. DO NOT take it internally. Use impervious gloves, eye protection, and if the TLV is exceeded or used in a poorly ventilated area. Always utilize the accompanying MSDS for information on Personal Protective Equipment (PPE) and Health Hazards.

TECHNICAL DATA SHEET UPDATED IN
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PC-WC GLOBAL FZ-LLC

Compass Building, Al Shohada Road Al-Hamra Industrial Zone-FZ,
Ras Al-Khaimah, UAE
Email: info@pc-wc.com
Phone +971542455817, www.pc-wc.com

All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

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