

iFlex PU10

ADVANCED ONE-COMPONENT POLYURETHANE SEALANT

DESCRIPTION

iFlex PU10 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.

USES

- Concrete expansion joints.
- Sealing door hinges, skylights and pot holes.
- To seal waterproof rivet seams and roof rails.
- To seal perimeter joints around windows and doors.
- Sealant is designed to seal concrete construction joints.
- Sealing Air conditioning equipment, flashing and gutters.
- Sealing corner moldings, fabricated roof-lap seams, bumper assemblies and body-to-cab joints in motor homes.

MAIN FEATURES

- Paintable
- Low VOC
- Odorless
- UV resistant/ fast curing
- Excellent adhesion without priming
- Single component & convenient packing
- Highly resistant to sea water, diluted acids and alkalis.

ADVANTAGES

- Easy to gun, Easy to tool
- Paintable, non-sticky after cure
- Excellent cut and tear resistance
- Accommodates $\pm 25\%$ joint movement
- Permanently flexible, excellent weatherability
- Cures to a tough, durable, elastic consistency with

STANDARDS

iFlex PU10 meets or exceeds the requirements of the following specifications:
ASTM C 920 Type S, Grade NS, Class 25.



TECHNICAL PARAMETER

Physical Properties	Test Method	Typical Value
Specific Gravity @ 25oC, g/ml	ASTM D1475	1.15±0.05
Skin Over Time @ 25oC, Minutes	-	10 - 35
Flow (sag or slump)	ASTM C639	Non Sag
Shrinkage, %	-	<5
VOC, (g/L)	USEPA Method 24	<25
Tensile Strength (N/mm2)	ASTM D412	1.3
Elongation at break, %	ASTM D412	>300
Hardness : Shore A	ASTM D2240	30±3
Movement Capability, %	ASTM C719	±25
Peel Strength (N), concrete	ASTM C794	>30
Effects of Accelerated Ageing @ 300 hrs. UV exposure	ASTM C793	No deterioration
Application Temperature (°C)	-	+5 to + 40

All values given are subjected to 5 to 10% variations

EXPANSION JOINT DESIGN

iFlex PU10 may be used in any joint designed in accordance with accepted architectural/engineering practices. Joint width should be at least 4 times anticipated movement, and not less than (5mm). While applied on an expansion joint the depth (D) of the sealant should be equal to the width (W) of the joints that are less than 10mm wide. For wider joints, width to depth ratio should be 2 : 1. The maximum width of the joint on which iFlex PU10 can be applied is 25mm.

Joint Width (mm)	10	12	15	20	25
Joint Depth (mm)	6	8	8	10	12
Joint Length (m)/600 ml	10	6.2	5	3	2

JOINT BACKING

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 depth of joint is insufficient for the use of backer rod, an adhesive backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at time of sealant application. Avoid using sharp tools.

YIELD

The following formula is an approximate guideline to calculate foreseen yield for a standard 600ml sausage of iFlex PU10.

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

Where: L = Length of sealant in metres obtained per cartridge.

D = Depth of the joint in mm

W = Width of the joint in mm

APPLICATION DETAILS

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. Triton recommends that surface temperatures be below 40°C at the time the sealant is applied.
APPLICATION	iFlex PU10 is easy to apply with conventional caulking equipment. Ensure that the backer rod is friction fitted properly. Mask the sides of the joint with masking 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.
PRIMING	iFlex PU10 typically adheres to common construction substrates without primers; however, due to the variability of substrate finishes available, where deemed necessary, use Tritosil Prime PA mockup or field adhesion test can be performed on the actual materials being used on the job to verify the need for a primer.
FOR OPTIMUM PERFORMANCE	<ul style="list-style-type: none">• In cool or cold weather, store container at room temperature for at least 24 hours before using.• iFlex PU10 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 iFlex PU10 within the specific application is always recommended to confirm adhesion and suitability of the application.• When using iFlex PU10 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.• Proper application is the responsibility of the user. Field visits by Triton personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.
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.
LIMITATIONS	<ul style="list-style-type: none">• Do not apply over damp or contaminated surfaces.• Do not use iFlex PU10 as a structural (load transferring) sealant
PACKING	600ml sausage, 20 sausages per carton
COLORS	White, Off-white, Grey, and Black. For other colour please contact local Triton representative

STORAGE	iFlex PU10 has a shelf life of 12 months when stored in tightly closed original casks, in a dry place at a temperature between +5°C and +25°C
CURING TIME	iFlex PU10 generally cures at a rate of 2mm per day at 25°C and 50% relative humidity. 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 internally. Use impervious gloves, eye protection if the TLV is exceeded or used in a poorly ventilated area. Always utilize the accompanying SDS for information on Personal Protective Equipment (PPE) and health Hazards.

Disclaimer: All technical data of this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control. Please note that because of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields. Information on this datasheet is subject to change without notice and should not be used for writing specification. For additional information on specific applications, please contact INNOBIT. The information contained herein, provides recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted based on the contents of this data sheet, or any verbal advice given, unless there is a case of willful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product. Innobit reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned copies of which will be supplied on request. All values given are subject to 5 – 10% tolerance. #Values achieved within 7 days after casting specimen at 25°C and 50% RH.



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