

## TECHNICAL DATA SHEET

# Trikol 1KPU

## One Part Low Modulus Polyurethane Sealant

**TRIKOL 1KPU** is an elastic, single component, gun-grade, moisture curing polyurethane sealant specifically developed to be used in building facade expansion joints where high elasticity is required. The product is suitable for sealing joints in pre-cast elements, external walling, curtain walling and cladding, panel walls, window and door perimeter sealing etc.

### TRIKOL 1KPU Benefits

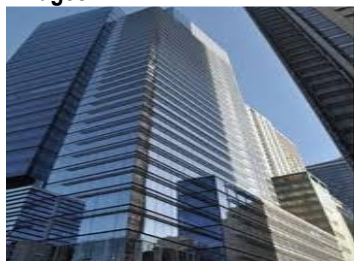
- One part, reduces the possibility of applicator error and possible joint failure
- Excellent thixotropy - non-sag
- Elastic low modulus
- Pitch-free - over paintable
- Movement capability +/- 25%
- Bubble-free curing, no weak areas for air bubbles to develop
- Excellent resistance to weathering.
- Very good adhesion to most construction materials especially concrete without the need of primer
- Permanently elastic over a wide range of temperatures



Bridges



Stadium



Buildings



Culverts



Dams



Industrial floors



Windows Sealing

### TRIKOL 1K PU Technical Data

<b>Chemical Basis</b>	Polyurethane
<b>Cure Mechanism:</b>	<b>Moisture curing</b>
<b>Specific Gravity</b>	1.42 +/- 0.02gr/cc
<b>Tack free time at 23°C and 50% r.h</b>	≈ 120 minutes
<b>Curing at 23°C and 50% r.h.</b>	. ≥ 2,5 mm/24h
<b>Hardness Shore A (DIN 53505)</b>	<b>20-25</b>
<b>Elastic modulus at 100% (DIN 52455)</b>	≤ 0,5 N/mm2
<b>Tensile strength (DIN 53504)</b>	1,5 N/mm2
<b>Elongation at break (DIN 53504)</b>	≥ 600%
<b>Elastic recovery (DIN 52458)</b>	80%
<b>Admissible joint movement</b>	+/-25%
<b>Application Temperature</b>	+5°C - +35°C
<b>Temperature Resistanc</b>	-40°C - +80°C

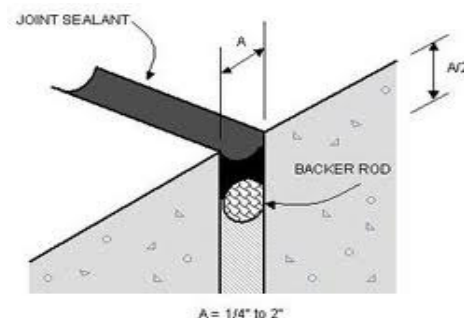
### Surface preparation:

Joint surfaces must be dry, clean and free of all contamination. Glass, metal and other non-porous surfaces must be free of any coatings and wiped clean with solvent. Precast panels using form-release agents other than polyethylene film must be sandblasted or mechanically abraded and dust free.

### Priming:

**TRIKOL 1K PU** has excellent adhesion properties even without the use of primer on most common building materials. However, natural stone, paints, coatings and other treatments of surfaces may present a difficult surface to which to adhere. Due to the number of unpredictable natures of these substrates, a preliminary test is recommended.

TRIKOL Porous Primer may be required for porous surfaces.



### Application:

Recommended application temperatures: 5° - 35°C. For easier use or cold weather application we recommend the material is stored at approximately 25°C prior to use. In order to guarantee free movement of sealant in joints, it is imperative that the sealant does not adhere to the bottom of the joint, therefore joint backer rod should be used at the proper depth. Apply appropriate primer to joint sides and observe waiting time to avoid any air bubbles which may arise from the solvent heating under un-cured sealant. Firmly extrude sealant into the joint making sure that it is in full contact with the sides of the joint and with the backing rod at the bottom. Keep the nozzle in the sealant; continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air. Masking tape

## TECHNICAL DATA SHEET

should be used where sharp exact joint lines or exceptionally neat lines are required. Remove the tape whilst the sealant is still soft.

### Joint Width to Depth Ratio

Joint Depth: Minimum 6mm Joint Depth

Width:Depth Ratio = 2:1

(considering min depth requirements)

For joints over 50mm width, ask for technical assistance

### Notes:

Do not apply in presence of curing silicones

Do not apply when moisture-vapour-transmission condition exists from the substrate as this can cause bubbling of the sealant, Avoid air entrapment when applying

### Joint Width to Depth Ratio

Joint Depth: Minimum 6mm Joint Depth

Width: Depth Ratio = 2:1 (considering min depth requirements)

For joints over 50mm width, ask for technical assistance

### Product

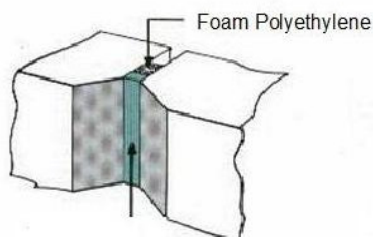
Colour Grey/black/white

Packaging 600ml foil pack – 20 per box

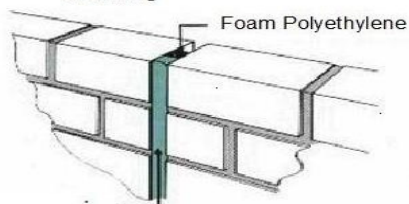
**Mfg By: NPT –**

**New Polyurethane Technologies-Italy**

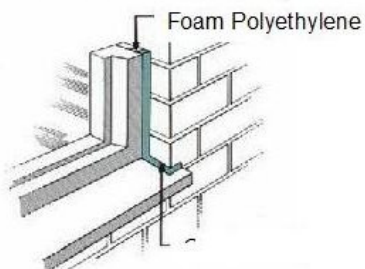
Jointing between precast concrete cladding panels



Sealing expansion joints in walling



Sealing perimeter joints between frames and surrounds



### Health and Safety

Ensure that protective gloves, overalls and protective footwear are worn at all times when handling the material. Avoid skin contact. Should the material come in contact with the skin it may be removed with soap and warm water. If discomfort continues, seek medical advice. If product comes in to contact with eyes, rinse with plenty of fresh water and seek medical advice.

### Storage and Shelf life

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

Shelf life is 12 months when stored as above.



### Technical Support

Tri Polarcon provides technical advisory service supported by terms of specialist in the field



### Disclaimer

The Company's Products are sold subject to the Company's Standard Terms and Conditions of Sale. Products are warranted against defective materials and workmanship. The Company makes every effort to ensure that all the information, recommendations or the specifications provided by it are accurate and true. However as the Company has no control over the conditions of use, it cannot accept any liability, either directly or indirectly regarding the usage of its products. Product specifications are subject to change without prior intimation to users as the products are being continuously upgraded.

## TRI POLARCON PVT. LTD.

**Mfg of epoxy floor coatings, Sealants, Waterproofing chemicals & Construction Chemicals.**

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