# ShaliSeal® PU



Moisture Cured Polyurethane Elastomeric Joint Sealant

## **Description**

ShaliSeal® PU is a single component, Moisture cured Polyurethane elastomeric sealant.

ShaliSeal® PU resists crack arising out of movements of joint materials.

It conforms to EN 14187-S 2003, BS 5212, ASTM C-920, ISO-11600.

#### **Characteristics - Physical**

Skin formation time, at 23 °C 50 % RH- hrs	8 - 10	Paintable / Over coating	Yes
Application Temperature, °C	5 - 40	Density, g / ml, 30 °C	1.20 ± 0.20
Solid content, %	> 90	Resistance to flow	
Service Temperature, °C	- 40 to + 90	<ul> <li>at 23 °C</li> </ul>	<u>&lt;</u> 1 mm
Colour	Grey	<ul> <li>at 50 °C</li> </ul>	<u>&lt;</u> 3 mm

#### Characteristics - Technical \*

Property	Method	Result	
Elongation at break, %	ASTM D 412	> 500	
Hardness, Shore A	ASTM D 2240	40 ± 5	
Elastic recovery, %	ASTM D 926	≥ 90	
Modulus of elasticity at 100 %, MPa	ASTM D 412	1.20 ± 0.1	
Movement Compatibility, % (MAF)	ASTM C 719	± 30	
Tear Strength, kg/cm	ASTM D 624	8 ± 2	
Tensile Strength, MPa	ASTM D 412	1.30 ± 0.2	

<sup>\*</sup> After 28 days of curing

## **Consumption (Approx)**

Joint Width, mm	15	20	25	30	35
Joint Depth, mm	8	10	12	15	15
Theoretical Coverage, mtr / 600 ml	5	3	2	1.3	1.1

## **Application**

- For all types of construction joints both Horizontal and Vertical.
- Runways.
- Roads.
- Bridge decks.
- Docks and harbors.
- Civil structures including building residential, commercial and industrial and prefabricated constructional panels.
- Can be used for joints of concrete, metal and glass.

#### **Advantages**

- Single component ready to use.
- Excellent adhesion to most of the building materials.
- Good weathering and ageing properties
- Excellent workability.
- Can be paintable.
- Fuel Resistant.
- Non-staining.

- Bubble free curing.
- Resistant to water, dilute caustic solution & acid, saline water, oil, etc.

## **Application Methodology**

## > Surface Preparation

- Remove all loose gravel, dirt, oil, grease and foreign matter by jet of dry air and clean the surface mechanically or by grinding to make it smooth before application.
- Concrete surface must be dry and stable at least for 28 days.
- Ensure that the moisture content in the prepared surface does not exceed 5% immediately before application of **ShaliSeal® PU**.
- To avoid adhesion of spill-over material beside joint, use masking tape at floor level beside both sides to get sharp edged neat and clean joint.
- Use back up material to avoid third face adhesion and to avoid contact between joint forming board & sealant.
- Use primer on vertical side faces of the joint to ensure strong bonding between substrate and sealant.

## Application of Material

- Use Extruded polyethylene rod of diameter of 25% more of the width at the base as separation layer, construction & control joints as back up material to avoid 3-face adhesion and to avoid contact between joint forming board & sealant.
- Prime the surface with ShaliPrime S @ 7 m² / L in case of concrete surface and 10 m² / L in case of metal surface.
- After primer is surface dry and noticeable surface tack is generated, apply ShaliSeal PU
  from the gun slowly and fill. Smooth out with soapy water by pressing the mastic against
  the edges and the joint.
- Remove protection strip.

#### Cleaning & Maintenance

Clean the equipment with solvent like Xylene, Toluene. Scrap off cured sealant on the equipment.

#### **Health & Safety**

- Avoid contact with skin / eyes and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

#### **Packing**

Available in 600 ml sausage.

#### **Storage**

Keep in cool dry place, under the shed, away from heat and humidity. Store in proper ventilated room and temperature should be between 10 - 25 °C.

#### **Shelf Life**

12 months in original unopened sealed condition.





## **Product Range**

Waterproofing & Insulation
 Road Surfacing
 Sealants & Adhesives
 Pipeline Coatings
 Protective/Anti-Corrosion Coatings
 Epoxy and Flooring
 Grouts and Admixtures (GARA)
 RestoFix - Repair/Rehabilitation
 Other Construction Chemicals



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