

# ShaliPUF® SA

High Performance Spray Applied Polyurethane Foam for Thermal Insulation



STP Limited

## Description

**ShaliPUF® SA** is a spray applied, two component, rigid, closed cell foam for thermal insulation for terraces, plantation roofs, walls. It is machine applied, can be sprayed as single or multiple layers as per the site requirement.

## Technical Characteristics @ 27°C, 55% RH

Property	Result	Property	Result
Appearance	Off white	Water absorption, % (ASTM D 2842)	< 2
Density, gm / cc	Comp-A - 1.15 ± 0.05 Comp-B - 1.23 ± 0.05	Thermal Conductivity (ASTM C 518:2017)	0.022 - 0.024 w / mk
Compressive Strength	320 - 400 kPa	Mixing Ratio (by volume)	1 : 1 (A : B)
Tensile strength	400 - 500 kPa	Closed cell content, %	95 ± 2
Core density, kg / m <sup>3</sup> (ASTM D 1622)	50 ± 2	Dimension stability, %	At -20 C° < 2 & at +70 C° / RH 95% < 2
Fire rating DIN 4102	Class B2	Gel Time, seconds	15 - 25

## Field of Application

- Roof, podium & wall surfaces
- Cold storages
- Tank insulation

## Advantages

- Efficient thermal insulation with high R value
- Seamless & water resistant
- Good dimensional stability
- Excellent adhesion with concrete, wood & steel surfaces
- Fast application, easy to handle & apply
- Chemical resistant, long life with no sag

## 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. Any concrete cracks if found will be opened and repaired with polymer modified mortar. The surface should be maintained above 10°C and free from surface moisture less than 5% and relative humidity should not exceed 80%. Surface dampness & higher humidity may affect bond with substrate and cause less closed cell insulation.

### ➤ Application of Material

- Prime concrete surface with **ShaliPrime® PUM** or **ShaliPrime® 2E** @ 0.2 kg to 0.3 kg per m<sup>2</sup> as sealer cum moisture barrier for the upcoming **ShaliPUF® SA** application.
- **ShaliPUF® SA** shall be heated in the machine chambers individually (temp 40°C to 70°C) and conveyed through delivery hoses. The mixing pressure needs to be maintained at 1000 - 1500 psi.
- **ShaliPUF® SA** should be applied in layers maintaining 10 to 30 mm thickness per go, larger thicknesses can be achieved by applying **ShaliPUF® SA** in several layers.
- **ShaliPUF® SA** is not UV stable same should be protected with next layer of protective PU or Polyurea coating (**ShaliUrethane® LM** or **ShaliProtek® PuR**).
- If the area is trafficable, shall be protected with a screed or tiles.

## Value based product data

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

## Health and 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

Comp A - 210 kgs. and Comp B - 250 kg. Combined Weight 460 kg.

## Storage

Drums must be stored in dry place, protected from rain, sun rays & heat.

## Shelf Life

12 months in original unopened sealed conditions.



**STP Limited**  
*Enhancing Structures' Life*

### Product Range

- Waterproofing and Insulation ■ Road Surfacing
- Sealants and Additives ■ Pipeline Coating
- Protective / Anti-Corrosive Coating ■ Epoxy Flooring
- Grouts / Admixtures ■ RestoFix- Repair / Rehabilitation
- Other Construction Chemicals



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