

# PENTENS SPU-1000

## Pure Polyurea Waterproofing Spray Coating



## Product Data Sheet

### Description

**PENTENS SPU 1000** is a solvent free, two-component pure polyurea spray coating. The seamless coating provides an elastic yet tear resistant surface for applications subjected to extreme wear and tear, strong impact and chemical exposure. Except for some yellowing effect, the coating is suitable for outdoor applications.

### Uses

PENTENS SPU is suitable for indoor and outdoor application such as:

- Outdoor and indoor Floor slabs
- Potable water tank lining
- Sewage treatment plants
- Water theme park, Decoration Design, playgrounds
- Secondary Containment for chemical tanks
- Swimming pools and waste water tanks
- Waterproofing
- Pipe / pipeline coating & lining
- Flooring and Parking Decks
- Bridge Coating
- Truck Bed Liners
- Marine
- Line Striping

### Advantages

- High elasticity
- Strong and tough, extremely high mechanical properties.
- Seamless
- Chemical resistance – very good resistance to wide range of industrial chemicals.
- Hard wearing
- Outstanding impact resistance
- Non-skid
- Excellent bond strengths to properly prepared substrates
- Fast Set. Return to Service in Minutes (Often Seconds)

### Technical & Physical Data

Form	Liquid
Color	Any color
Solids	100%
Hardness (Type A/1 sec) ASTM D2240-05	76
Tensile Strength (kgf/cm <sup>2</sup> ) ASTM D638-03	171
Elongation (%) ASTM D638-03	503%
Tear Strength (kgf/cm) ASTM D624-00	75
Abrasion Resistance (g) ASTM D4060-07 (H-22, 1000g, 1000 cycles)	0.27g
Water Vapor Transmission (g/m <sup>2</sup> xh) ASTM E96-05 Method B	0.86
Tack free time	30 seconds
Water Resistance (24 hrs) ASTM D543-06	No abnormality
Acid Resistance (23 <sup>0</sup> C/5% H <sub>2</sub> SO <sub>4</sub> /8hrs) ASTM D543-06	No abnormality
Alkali Resistance (23 <sup>0</sup> C/30% NaOH/8hrs) ASTM D543-06	No abnormality
Gasoline Resistance (23 <sup>0</sup> C/Unleaded Gasoline#95/48hrs) ASTM D543-06	No abnormality
Heat Resistance (120 <sup>0</sup> C/24hrs) ASTM D573-04	No abnormality
Pliability (-40 <sup>0</sup> C) ASTM D146-04	No abnormality
Recommended thickness	1.0 to 3.0 mm thick
Mixing Ratio	1 to 1 by volume
Self Life	12 months when unopened and damaged
Storage condition	Store in a dry cool place
Packaging	
▪ In pails (A:B=20:20)	40kg/set
▪ In bulk drums	400kg/set

### Important Notes

1. Thoroughly agitate B part (resin blend) before use.

## Instruction for Use

### Surface Preparation

All the surfaces must be clean, free from grease, oil, laitance, and remove all the dirt and contaminants, which might affect adhesion. The impurity outside the structure body should be cleaned thoroughly.

Any crack or water leakage area should be pre-treated and reinforced with PENTENS Repair System (for more detail, please refer to our Technical Department) before the waterproofing.

### Application

This material is designed for application with heated, plural component airless spray equipment. Because of the relatively high viscosity and fast reactivity of this product, pressure of at least 1800psi-2500psi (126-175kg/cm<sup>2</sup>) are required to ensure satisfactory mixing.

Primed coats: PENTENS E-10@ 0.2kg/m<sup>2</sup>/coat

Finish coats: PENTENS SPU-1000

- 1.0mm / 1.10kg /m<sup>2</sup>
- 2.0mm / 2.20kg /m<sup>2</sup>
- 3.0mm / 3.30kg /m<sup>2</sup>

### Curing

For optimum performance, PENTENS SPU-1000 should be allowed to cure for 12 hours before the finishing concrete, tiles etc and during this time precautions must be taken in order to prevent damaging to the coating.

### Note

The best method to assure good penetration of the first coat into the surface is by application with a nap roller. The succeeding coats may be spray or roller applied.

### Cleaning

Tools and equipment just can be clean with clean water immediately after use.

## Safety

Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. In case of contact with eyes, wash thoroughly with plenty of water and seek medical advice if symptoms persist. If contact with skin occurs, it must be removed before curing takes place. Wash off with an industrial skin clearer followed by plenty of soap and water. Do not use solvent. Ensure adequate ventilation when using these products.

