

# PENTENS PU-300

## One Part Polyurethane

## Product Data Sheet

### Description

Pentens PU-300 is a one-part polyurethane hydrophobic PU grouting material, specially designed for concrete construction joints and cold joints. These unwanted openings in concrete structures may cause serious problems in water leakage. Most of these problems can be solved by utilising the PENTENS Pressure Injection Systems that has been proven to stop water leakage permanently. It also works for slabs on grade, construction or control joints, parking garages, manholes, tanks, dams and many other structures.

### Uses

Areas of application include:

- Floor slabs
- Suspended floors
- Terraces and balconies
- Patios
- Bathrooms
- RC gutters and planter boxes
- Swimming pools
- Basements and fountains
- Retaining walls

### Advantages

- Deep penetration into small cracks.
- Form increases in volume to fill cavities and voids.
- Adjustable gel times.
- Excellent bond to wet surfaces
- Inert after curing, constant volume, no shrinkage.
- Does not create new cracks.
- Non-toxic.

### Technical & Physical Data

Form	Single-Part Liquid
Color	Dark Brown
Solubility in Water	Hydrophobic
Max. Expansion, %	3000
Induction Time, 20°C/68°F	30 sec
Elongation at break (%) (ASTM D 412-98)	>20
Gel Time, 20°C/68°F	40 sec
Unconfined Compressive Strength (Sand Filled)	2000 psi
Corrosiveness	Non-Corrosive
Chemical Resistance	Resistant to most organic solvent, mild acids, alkalis, etc.
Shelf Life	1 year when unopened and undamaged
Storage Condition	Store in a dry, cool place.
Packaging	20kg /pail

### Important Notes

1. Minimum ambient and substrate temperature is 5°C.
2. Store material in a dry, cool place.

## Instruction for Use

### Step 1: Clean Surface

Sometimes the concrete surface is hidden under a surface of mineral deposits left from long-term water leakages.

### Step 2: Drilling Injection Holes

In order to inject the resin into the crack, it is necessary to install injection ports or also called mechanical packers. The depth of the drill hole should intersect close to the center of the structure, if possible.

### Step 3: Insert Injection Packers

Place packers into the hole. The top of the rubber sleeve should be below the concrete surface. If the packer could not be pushed into the hole, tap it in. Tighten the packer with a wrench as tight as possible.

### Step 4: Flush Crack If Necessary

Under certain circumstances, it can be very useful to flush the crack with water to improve subsequent penetration of PENTENS injection resin into thicker walls.

### Step 5: Crack Injection

Choose proper resin for the correct application. The nature of the crack / joint and the conditions at the job site determine the choice of material. Active water flow at a higher rate is best stopped by using PENTENS PU-300. Cracks and expansion joints should be injected with PENTENS PU-101, hairline cracks and dry cracks should be sealed using PENTENS T-800. Some problems can be solved by using a combination of products.

### Step 6: Clean Up

Once the injection work is completed, a good and thorough cleanup is essential. The packers can be removed within 1 hour and the holes should be patched back using PENTENS T-800.

For more details, please refer to PENTENS Technical Department.

## Curing

Tools and equipment can be cleaned with thinner 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, rinse 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 cleanser followed by plenty of soap and water. Do not use solvent. Ensure adequate ventilation when using these products.

## Cleaning

Tools and equipment can be easily cleaned with water after use.