

# PENTENS PU-130

## Product Data Sheet

### Polyurethane Spray Foam Insulation System

#### Description

PENTENS PU-130 is a two-component, 1:1 ratio, closed-cell polyurethane foam insulation system which produces a solid foam with exceptional compressive strength when processed through suitable spray machinery (Graco etc). The foam surrounds the structure with a lightweight blanket of insulation that creates a controlled comfort zone inside or outside the structure, contributing to its overall structural integrity.

#### Uses

PENTENS PU-130 is used for thermal and acoustic insulation in:

- Exterior and interior of agricultural buildings
- Yachts/canal barges
- Internal industrial roofings
- Internal soffit slabs
- Domestic slate or tiled roofs
- RC flat roofs
- Internal walls

PENTENS PU-130 is also suitable to be used as a protective layer for waterproofing before backfilling soil at basement walls or pouring concrete at roof decks.

Standard PENTENS PU-130 should not be used on substrates below 50°C. When used externally, the foam must be protected from ultra-violet radiation and atmospheric degradation by a suitable elastomeric coating, e.g. PENTENS SPU1000.

#### Advantages

- Greater structural integrity.
- Multi-purpose for a wide range of building applications.
- Can be trimmed, sanded and sawn. If necessary, it can be painted and plastered as well.
- Can be applied to damp surfaces.
- Good adhesion to most construction surfaces, such as wood, brick, concrete, metal and plastic.

#### Technical & Physical Data

Cream Time	3-5 seconds
Tack Free Time	15-20 seconds
Rise Time	20-35 seconds
Density	32.2 kg/m <sup>3</sup>
Adhesive Strength	
▪ PVC	1.4 kgf/cm <sup>2</sup>
▪ Aluminum plates	1.3 kgf/cm <sup>2</sup>
Elongation At Break	8-12 %
Bending Strength (kgf/cm <sup>2</sup> )	1.14
10% Compressive Strength (ASTM D 1621)	0.851 kgf/cm <sup>2</sup>
Tensile Strength (Perpendicular to rise)	1.1 kgf/cm <sup>2</sup>
Shear Strength (Perpendicular to rise)	1.4 kgf/cm <sup>2</sup>
Close Cell Content	92 %
Thermal Conductivity	0.0272 W/mK
Amount Of Water Absorption (g/100cm <sup>2</sup> )	1.20
Water Vapor Transmission (25mm,38°C, 88% RH)	3.9 ng/Pa.sm
Dimensional Stability (7 days @ -15°C)	- 0.6 % vol.
Dimensional Stability (7 days @ 70°C, 95% RH)	+ 5.0 % vol.
Ozone Depletion Potential	ZERO
Service Temperature	-15°C to 70°C
Self Life	12 months when unopened and undamaged
Storage Condition	Store in a dry, cool place
Packaging	
▪ In pails (A:B=20:20)	40kg/set
▪ In bulk drums (A:B=200:200)	400kg/set



Disclaimer. All representations and recommendations set forth are given in good faith and to the best of our knowledge. However due to varying conditions and applications, the buyer shall conduct its own tests of this product before use. Under no circumstances will the manufacturer be liable for any loss or damages caused by incorrect usages. The sale of this product shall be on terms and conditions set forth on Pentens order acknowledgement.

**Equipment**

PENTENS PU-130 can be processed through all standard foam spray machines. The machine should be capable of maintaining the mix ratio at  $\pm 2\%$  accuracy and controls the component temperature between 40 to 50°C (variable).

**Recommended Machine Settings**

Block Temperature	40°C to 50°C
Hose Temperature	40°C
Chemical Pressure	1500 psi

*Note:*

*Difference in chemical pressure of isocyanate / resin not greater than 200 psi.*

**Instruction for Use**

**Surface Preparation**

The substrate should be clean, dry and free from dirt, grease, oil and loose particles. In certain cases, primer may be necessary to maximize adhesion. Climatic conditions with regard to humidity and wind velocities must be suitable for spraying.

**Application**

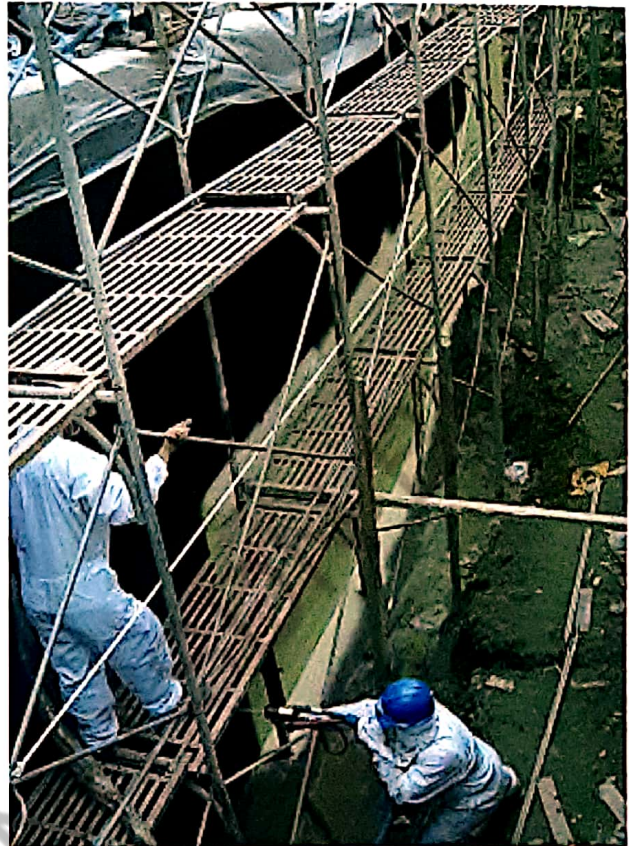
The foam should be built up in passes of not less than 15mm and not more than 10 minutes should elapse between passes.

**Consumption**

Approximately 1.25kg/25mm/m<sup>2</sup>, 2.5kg/50mm/m<sup>2</sup> depending on the porosity of the substrate and excluding 5% of wastage.

**Health & Safety**

Keep away from fire sources. Do not smoke. Sufficient ventilation is recommended, otherwise wear respiratory equipment. Gloves and goggles must be worn to protect hands and eyes. In case of contact with eyes, rinse with clean water and seek medical advice if symptoms persist. Cured foam can only be removed mechanically (sanded or scraped). Uncured foam can be removed with solvent.



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