PENTENS PU-603

High Performance PU Floor Coating

Product Data Sheet

Description

PENTENS PU-603 is a two-component solvent-based PU coating system which is designed specifically for industrial use.

The cured film forms a hard but flexible coating with excellent adhesion to clean concrete, sand/cement granolithic screeds and certain metal surfaces. It cures to a semi-gloss, impervious finish which is easily cleaned.

Uses

To provide a hardwearing, easy-to-clean and attractive floor coating in areas where high resistance against chemical attack is required. It is suitable for use in:

- Production assembly areas
- Workshops
- Dairies
- Soft drink production
- Bottling plants
- Breweries
- Kitchens
- Flat roofs

It is particularly suitable in wet working areas and areas where chemical spillage is likely, e.g. plating shops, processing plants, dye works etc.

Advantages

- Easy application.
- Super adhesive strength.
- Low maintenance cost.
- High mechanical strength.
- Easily cleaned surface.
- High resistance against a wide range of industrial chemicals.
- Hygienic - impervious finish ensures easily cleaned surface. (from acid, alkali, solvent and etc.
- Attractive – available in a range of standard colours and also in a clear grade to improve the working environment.
- Low viscosity.
- Short waiting time.

Technical & Physical Data

The values given below are average figures achieved in laboratory tests at 20°C and 35°C. Actual values obtained on site may show minor variations from those quoted.

	@20°C	@34°C
Pot Life	40 mins	30 mins
Tack Free Time	3-4 hrs	2-3 hrs
Time Between Coats	12-16 hrs	8-12 hrs
Initial Hardness	24 hrs	18 hrs
Full Cure	7 days	5 days
Dry Film Thickness (include primer)	0.3mm (approx)	
Shelf Life	1 year when unopened and undamaged.	
Packaging ■ PU-603 A ■ PU-603 B	 10kg /pail & 20kg /pail 5kg /pail & 10kg /pail	
Consumption	0.3kg/m²/2 coats	

Chemical Properties

PENTENS PU-603 is resistant to a wide range of chemicals. Specific data is available on request.

Good housekeeping is essential in areas where chemical spillage is likely to occur. It is especially important that such spillage should not be allowed to dry so as to avoid excess concentration of chemicals.

Application Instructions

Surface Preparation
It is essential that PENTENS PU-603 is applied to sound, clean and dry substrates in order to achieve maximum adhesion between the floor coating and substrate.

PENTENS PU-603 is a relatively thin coating, therefore substrate must be in fine texture. Any surface irregularities may show through, causing excessive wear on high spots and changing the perceived colour of the coating.

New Concrete Floors
Unless water content is specially reduced, the floor should be at least 28 days old and give a hygrometer reading of not exceeding 75%RH and primed with PENTENS E-008 Solvent-Free Epoxy Primer.

Old Concrete Floors
A sound and clean substrate is essential to achieve maximum adhesion. Light grit blasting or acid etching should be carried out for new concrete floors. Oil and grease penetration should be removed by hot compressed air treatment and primed with PENTENS E-008 Solvent Free Epoxy Primer.

Steel Substrates
Steel substrates should be grit-blasted according to surface quality and primed with an epoxy primer.

PU Screed
PENTENS PU-603 can be applied to PENTENS E-501 epoxy resin screeds. High spots or trowel marks should be rubbed away and dust and other debris removed by vacuum cleaning.

Mixing
PENTENS PU-603 must be mixed homogeneously prior to application using an electrical or pneumatic power stirrer at approximately 300-400 rpm. Mixing time is minimum 3-4 minutes but depending on the circumstances it may take longer until a homogeneous mix is achieved.

Coating
The mixed PENTENS PU-603 should be applied to the prepared surface using a brush or lamb wool roller. The second coat may be applied as soon as the first coat shows initial drying after approximately 8 hours. The time interval will be depend on the type of surface and the ambient conditions.

Cleaning
PENTENS PU-603 should be removed from tools and equipment with thinner immediately after use. Hardened material can only be removed mechanically.

Limitations
PENTENS PU-603 should not be applied onto surfaces known likely to suffer from:
- Temperatures below 5°C
- Rising dampness.
- Relative humidity greater than 75%RH
- Very heavy traffic such as sound work benches, drink machines etc
- Asphalt floor & PVC tiles or sheet

Maintenance
The service life of a floor can be considerably extended with good housekeeping practices. Regular cleaning of PENTENS PU-603 may be carried out using a rotary scrubbing machine with a water miscible cleaning agent or hot water washing at temperatures up to 50°C.

Safety
PENTENS PU-603 should not come in contact with skin and eyes or swallowed. Ensure adequate ventilation and avoid inhaling its vapors. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye protection. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provides additional skin protection. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical treatment immediately – do not induce vomiting. PENTENS PU-603 is flammable. Keep away from sources of ignition. No smoking allowed. In the event of fire, extinguish with CO2 or foam. Do not use a water jet.

UFON NANO-CHEMICAL LTD.
8F, No.2, Lane 348, Sec 2, Chung-Shang Road,
Chung Ho City, Taipei Hsien, Taiwan, R.O.C.
Tel: +886 2 2240 0220 Fax: +886 2 2242 6536
URL: www.pentens.com
E-mail: pentens@ms35.hinet.net

DONG JI (M) SDN. BHD.
No.4, Jalan BP 4/1, Bandar Bukit Puchong,
47120 Puchong, Selangor, Malaysia.
Tel: +603 8066 8287 Fax: +603 8066 9287
URL: www.pentens.com.my
E-mail: dji@pentens.com.my