NPU-12

Water-Based Polyurethane Nano Coating

Pentens® NPU-12 is a nanotechnology HDI based polyurethane coating of finest quality, durable, water repellent, fungus/algae/bacteria resistant, UV resistant, scratch resistant, anti-corrosive sealer, primer & finish for a wide variety of exterior and interior surfaces.

USES

Interior / Exterior applicable surfaces are including:
- Concrete
- Plaster
- Metal
- Stone

Areas of use are such as:
- Food and pharmaceutical industries
- Hospital and hygienic clean rooms

ADVANTAGES:

- Outstanding adhesion
- High resistance to weathering and blistering
- Self-cleaning
- Excellent color retention, non-yellowing
- Zero VOC
- Additional features like termite-free, stain resistant and anti-sticking.
- Easy clean-up using water

TECHNICAL & PHYSICAL DATA

Appearance (mixed)	Brushable / rollable / sprayable uniform liquid in color
Finish	Semi-gloss
Pot life @ 25°C	45-60 minutes
Re-coat time	6 hours @ 25°C and 50% RH
Full cure @ 25°C	3 days
Viscosity (Brookfield LVF, 30rpm, 25°C)	1100 cps
Drying Time (touch dry)	4 hours
Pliability (ø 3mm)	Unaffected
Water resistance in 100% Relative Humidity, 24 hours	Unaffected
Chemical resistance (5w/v % H_2SO_4 / 24 hours)	Unaffected
Heating residue	65%
Light exposure (Fluorescent UV-Condensation Light)	Unaffected
Consumption	Approx. 0.15 kg/m²
Self life	12 months when unopened/damaged
Storage condition	Store in a dry cool place
Packaging	
Clear:	NPU-12TA: 10 kg/pail NPU-12TB: 1 kg/can
Pigmented:	NPU-12A: 10 kg/pail NPU-12B: 1 kg/can

INSTRUCTION FOR USE

PRECAUTIONS FOR USE

- The application and drying temperature must be between 10°C and 35°C.
- Do not apply to heavy duty industrial floor.

SURFACE PREPARATION

Surface must be clean, smooth, dry, and free of wax, grease, oil, loose or peeling paint, and other foreign material.

MIXING

Pentens® NPU-12 must be mixed homogeneously prior to application, using an electrical or pneumatic power stirrer until a homogeneous mix is achieved.

APPLICATION

The mixed Pentens® NPU-12 should be applied to the prepared surface by using brush or lamb wool roller or spray equipment. The second coat may be applied as soon as the first coat has initially dried (typically 4 to 6 hours). The time will be dependent on the type of surface and the ambient conditions.

NEW WORK

For maximum durability for exterior or interior application, use Pentens® T-009 as a primer & sealer, followed by two coats finish.

REFINISH WORK

Follow conditions listed above. Previously painted, glossy surfaces should be lightly sanded. Remove old flaking paint and clean down thoroughly to remove any dust or powdery paint. Fill cracks with Pentens® EPTM as a sealer for best result. Spot prime all patched areas with Pentens® T-009 primer. Allow all primers to dry thoroughly before applying finish coats.

COVERAGE

Approximately 6~10 square meters per kg, depending on the porosity of the substrate.