

PENTENS T-305TH

Flexible Cementitious Waterproofing Coating

Product Data Sheet



Description

PENTENS T-305TH a two-component flexible cementitious waterproofing slurry, comprising ready packed powder (PENTENS T-305TH B) and resin (PENTENS T-305TH A). It can be applied to both concrete and mortar to prevent water ingress.

Uses

PENTENS T-305TH can be used for positive and negative side waterproofing.

- Potable water tanks
- Suspended floors
- Terraces and balconies
- Bathroom floors and walls
- Basements
- Retaining walls

Advantages

- Low VOC.
- Strong adhesive strength.
- Slightly flexible.
- Pre-batched and ready for use.
- High workability.
- Anti-carbonation.
- Good wear resistance.
- Impermeable.
- Increased frost and salt resistance.
- Resist carbon dioxide penetration.
- Non-toxic.
- Easily mixes and applies.
- Good adhesion to substrates.
- Environmentally friendly.

Technical & Physical Data

Tensile Strength (kgf/cm ²) (ASTM D412)	12.30
Elongation (%) (ASTM D412)	75.98
Tear Strength (kgf/cm ²) (ASTM D624)	13.70
Hardness (Shore A) (ASTM D2240)	>5
Water Absorption (%) (ASTM D570-98(2010)e1	1.13
Shear Strength (kgf/cm ²) (ASTM D1002)	5.90
Water Vapor Transmission of Material	
i. WVT (g/hxm ²)(23°C, 50%) - ASTM E96	53.42
ii. Permeance (g/sxm ² xPa) - Method B	1.98 x 10 ⁻⁵
Abrasive Test (g) – Taber CS-17, 1000g, 1000 Cycles (ASTM C501)	0.032
Puncture (kgf)	9
Compressive Strength @ 28 days (kgf/cm ²) (ASTM C39/C39M-12a)	280
Pot Life	30min at 30°C and will be shortened at higher temperatures
Shelf Life	12 months when unopened
Storage Condition	Store in a dry, cool place
Packaging	
■ T-305TH A:	10kg /pail
■ T-305TH B:	25kg /bag

Important Notes

1. Minimum ambient and substrate temperature is 5°C.
2. Never apply more than 1 kg/m² of PENTENS T-305TH in one single layer.
3. Apply to only clean and sound substrates. Surfaces should be well dampened but free from water and leakages.

Green Label Test Data

Heavy Metals :

(EPA 3025 / EPA 6010B : ICP)

a. Cadmium (Cd)	Not Detected
b. Lead (Pb)	Not Detected
c. Total Chromium (Cr)	Not Detected
d. Mercury (Hg)	Not Detected

Volatile Organic Compounds

(ISO 11890-2) (g/L)	Not Detected
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Total Halogenated Organic Solvent

(ISO 11890-2) (%)	Not Detected
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Total Aromatic Organic Solvent

(ISO 11890-2) (%)	Not Detected
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Epichlorohydrin

(ISO 11890-2) (%)	Not Detected
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N-Methyl Pyrrolidinone

(ISO 11890-2) (%)	Not Detected
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Formaldehyde

(High Performance Liquid Chromatography) (%)	Not Detected
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Alkyl Phenol Ethoxylate

(LCMS-MS) (%)	Not Detected
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Flash Point

> 61

(ASTM D3828-07a) (°C)

Instruction for Use

Surface Preparation

Surfaces must be clean, free from grease, oil and loose adhering particles. All surfaces must be as flat and level as possible.

Absorbent surfaces have to be thoroughly saturated with water prior to applying the first coat of PENTENS T-305TH. However, no loose standing water should be on the surface before application.

Mixing

Add PENTENS T-305TH B (25kg powder) gradually to the PENTENS T-305TH A (10kg resin). Mix thoroughly until they blend completely with cement compound. Use mixture within 30 minutes.

Consumption

Standard coating system - PENTENS T-305TH applied in minimum of two coats (exclude primer)

1 x coat of PENTENS T-007 at 0.2kg/m²

2 x coats of PENTENS T-305TH at 1.0kg/m²/coat

Water retaining structure coating system -

PENTENS T-305TH applied in minimum of three coats (exclude primer)

1 x coat of PENTENS T-007 at 0.2kg/m²

3 x coats of PENTENS T-305TH at 1.0kg/m²/ coat

NOTE:

- PENTENS T-305TH must be applied in minimum of 2 coats.
- More coats may be required in areas of extremely high infiltration.

Application

Dilute 1 portion of PENTENS T-007 permeable primer with 3 portions of clean water and apply directly onto the surface in order to improve the bonding.

Apply PENTENS T-305TH to construction surface by brush, roller or spray. The time interval between coats shall be 4-8 hours. Make sure that the first layer of waterproofing is dry and formed as membrane before applying subsequent layer..

Over Coating

After the primer, PENTENS T-305TH can be applied directly for areas exposed to hot drying winds. For indoor areas, allow approximately 30 minutes after the primer before applying PENTENS T-305TH.

For more details, please refer to PENTENS Technical Department.

Curing

For optimum performance, PENTENS T-305TH should be allowed to cure for 24 hours before applying the finishing concrete, tiles etc. During this time, precautions must be taken in order to prevent damage to the coating.

Cleaning

Tools and equipment can be easily cleaned with clean water immediately after use. Hardened material can only be mechanically removed.

Safety

As cement is alkaline and may cause irritation, wear gloves and goggles when using PENTENS T-305TH. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice if symptoms persist.

PENTENS



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