

### **Armourtech DPS 101**

Deep penetrating Concrete sealer

### **Description**

**Armourtech 101** concrete sealer is a specially formulated high tech clear/flat water based sealer that has a penetrating inorganic potassium modified material that "fuses" to concrete and appreciably helps stop water, oil, gas, grease, salts and other fluids from damaging concrete.

**Armourtech 101** unique formula reacts with the lime in the concrete to form a gel. The gel then hardens and consequently densifies the concrete, decreasing the moisture permeability and porosity. By this fusion, the substrate actually becomes better concrete.

Armourtech 101 is good as a cure & seal.

**Armourtech 101** is an excellent penetrating sealer for all cementitious applications.

**Armourtech 101** is waterborne contains no VOC's, is non hazardous not toxic and has no odour.

#### **Uses**

New construction – as cure then seal Existing concrete – as DPS sealer

Below grade / pre-cast / tilt-up / form / bridge decks

Driveways/Walkways/Basements Concrete Pavers / Split face Masonry products / Mortar

Pool decking / Marcite / Gunite/Stucco

Bridges / Tunnels / Foundations
Parking Garages / Warehouse Floors

Decorative/Coloured Concrete Applications

Historical Preservation

Any concrete structure or product

**Armourtech Solutions -** Seals - Conditions - Protects <u>www.nzisl.co.nz</u>



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Preparation: Surfaces must be clean and free of dirt/debris/mildew/oils/grease/and

other sealers.

**Clean up:** Clean up spray equipment with soapy warm water.

Health & Safety: Avoid contact with skin & eyes. EPA/OSHA Compliant – contains

no solvents/0% VOC (Volatile Organic Compounds)

Non-Hazardous to plants and animals. Wash application materials

with water.

First Aid: Eyes: Flush with water for at least 15 minutes.

Skin: Wash thoroughly with soap and water.

Inhalation: No TVL established. Move subject to fresh air. Digestion: If swallowed, give 2 glasses of water to drink.

Consult physician.

Finish: Flat Colour: Clear

Coverage: 5-10m2 per/ltr

No. Applications: 1

**Drying Time:** 3-5 hours per application

Shelf Life: 2 years, stored unopened above freezing temperature
Clean Up: 2 years, stored unopened above freezing temperature
soap & water (avoid contact with glass & plastic windows &

lenses) Note: DO NOT FREEZE

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### **Application:**

Surface may be a little damp but not wet. Surface/outside temperature should be 1.5 degrees C or more. Apply by *low-pressure spray* – a common garden sprayer works well. Apply an even blanket mist just to wet – not soak. When over applied, white, chalky deposits may appear after drying. These can be stiff-broomed or power washed off.

### New Concrete: Use as the Cure & the Sealer

Ideally, the best time to apply is when bleed water is gone and concrete will withstand the weight of a man. OK to apply anytime after placement. Avoid rain or freezing for 12 hours. Apply by spray with medium saturation, careful not to over apply.

\* We recommend a maintenance mist after the 28-45 day curing cycle complete, if possible, for best results.

#### Old Concrete: Use as a Penetrating Sealer

Always clean, rinse thoroughly, especially when using oil/citrus base cleaners. Flush out well, let dry and apply by low-pressure spray. Acid etching may be necessary for tight or smooth troweled surfaces to aid in penetration.

\* Always test first for penetration receptibility.

**Armourtech 101** can be trafficked on immediately by light and heavy traffic of any type.

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## **Armourtech DPS 101**

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Boiling Point: 212 F (same as water) Vapour Pressure: /20C/68 F water

Vapour Density: N/A
Solubility in Water: Excellent
Evaporation Rate: Same as water
Appearance & Odour: Clear-slightly amine
Specific Gravity: (H20-1):1.1 to 1.3 @ 20C

% Volatile by Volume: N/A PH: 11.5 Flashpoint: N/A Flammable Limits: N/A

ASTMD 2939: Resistance to water solubility, flexibility, no cracking.

ASTMD 466: Resistance to water flow and Action. Excellent adhesion. No

demulsification.

ASTME 96: Water vapour transmission 0.04 grains/sq ft./hr. Water permeability—

0102 perms

ASTMC 836: Film thickness on a vertical scale

SS-W-110C: Water repellence on masonry test: 1.925% avg.

ASTMC672: Freeze/thaw cycle – 100 day cycle

ASTMC-156: Water retention 0.47 kg/m2, Specification – 0.55 kg/m2

ASTM C309-98a: Moisture loss - 1025 kg/ms ASTM C115-00: Moisture loss - 0.19 kg/m2

Adhesion ASTM: Elcometer Pull – 280 lbs-concrete failed 1<sup>st</sup> / no delamination ASTM C642 & C672 Absorption: Phase 1-48 hr: 0.64%; Phase 2-50 day: 1.32%

ASTM Sealing Resistance: No Scaling

If concrete is heavily troweled (smooth, tight) acid etch with a mixture of 1 part muriatic acid to 4 parts water. (Pour mixture on surface, lightly push around with brush broom, leave on for 3-5 minutes, rinse thoroughly.) Let surface dry. **Armourtech 101** will not work with any other product with an oil base, such as asphalt, paints, vinyl, etc. When **Armourtech 101** cannot penetrate or over applied, a slight chalky residue may lay on surface. A stiff broom, power cleaning or time can usually remove this.

This product is considered a non-hazardous chemical under the OSHA Hazard Communication Standard / (29CFR 1910.1200)