

Water based and impregnating concentrate

DESCRIPTION

3001 Concentrate is a solvent and VOC free, self-assembling oligomeric micro emulsion in water. Manufactured with a new patented process, the very consistent material mix is providing a capillary impregnation without filling the pores and capillary structure of the substrate.

The product is designed as a water-soluble impregnating agent for masonry, including highly alkaline surfaces. The product content of higher alkylated raw material allows the diluted 3001 to be used on alkaline building materials. It chemically bonds with concrete and masonry substrates and becomes invisible once dry.

Its penetration and subsequent chemical reaction with the concrete allow it to provide long term protection for concrete by significantly reducing the ingress of liquid water and any dissolved salts that the water may carry.

This product prevents the ingress of liquid water carrying chloride ions. 3001 is VOC free and has been tested as LEED conform product.

RECOMMENDED FOR

3001 concentrate diluted can be used for the water repellent treatment on following cement based substrates:

- Concrete
- Manmade Stone
- Pavers
- Concrete Bricks
- Plaster, Render
- Fiber Cement products

It is also suitable as an aqueous deeply penetrating primer for coatings like emulsions, silicone resin paints and ready mixed coloured acrylic render. On Natural Stone please test first. 3001 is not for painted or coated surfaces.

FEATURES & BENEFITS

- **Water based, environmentally friendly**
- **VOC free, LEED conform product.**
- **Water dilute able with ordinary tap water**
- **Water repellent.**
- **Dilution stable after thinning**
- **Good penetration into porous materials**
- **Excellent moisture regulation**
- **Economical, outstanding coverage rate**
- **permeable to vapour**

SPECIFICATIONS

Supply form	Liquid
Colour	milky
Density	Approx 1.0
Solvents	< water
Flashpoint	N/A
Storage temperature	Not below 4°C /39°F
Application temperature	4 to 35 °C / 39 to 86°F

SURFACE PREPARATION

The surface must be clean, dry and free of dirt, dust, contaminants, oil and coatings.

Standard surface preparation can be used. Old and moss and algae invested substrate should be cleaned with high pressure water. Efflorescence must be removed.

Contact with solvent borne impregnating agents e.g. residue in application equipment or with tin compounds must be avoided. On new concrete or masonry special surface preparation is normally not required

PRODUCT PREPARATION

A typical formulation for diluting 3001 Concentrate with water is as follows:

- 1 part by volume 3001 Concentrate
- 9 parts by volume water for direct surface application

The amount of water added may vary between for surface treatments of some natural stones. Penetration is the important factor. The user should determine the optimum dilution for the particular application. Normal tap water can be used for the dilution.

MIXING

Ensure cleanliness during the dilution process to avoid contamination with other chemicals. Containers, hoses, pipes and pumps should be thoroughly cleaned before use to avoid such contamination. Place the appropriate amount of 3001 Concentrate into the mixing container first. Then add the water to the emulsion while mixing continuously and vigorously. The container should be kept tightly closed after the mixing.

APPLICATION

The surface must be dry

Standard processes for the water-repellent treatment of masonry can be used. These include spraying, dipping, and flow coating, or brushing. Avoid overspray or splashes on adjoining surfaces, or surfaces not to be treated.

Before application on large surfaces, trials should be conducted to determine the optimum active substance concentration.

It is very important to apply a significant amount to the substrate to get the penetration depth. 2 coats wet on wet should be applied. On standard concrete 200 ml/m² must be applied. The concrete must be treated to full saturation. The product will penetrate slowly and completely into the concrete. Product sitting on the surface during the application is not an issue and will penetrate as well. Vertical surfaces like facades should be treated from the ground up.

Don't apply in bad weather conditions. Impregnation needs 2 – 3 hours to be rain proof. We are not recommending the use of paint rollers because such applications methods are tend to apply inadequate volumes.

3001 for Surface Application



BULK IMPREGNATION

Please refer to the data sheet for the use as bulk treatment.

CURING

First results will be visible after 24 hours.(low water absorption)

During application and drying, the temperature should not drop below +2°C/ 41°F.

Dries within 1 -4 hours on the surface under normal conditions (20°C/68°F, 50% relative humidity). The drying time varies with the temperature / humidity and surface conditions.

The low water absorption properties appear after 8-24 hours. and after 24 hours in bulk impregnation.

Surface application temperature: + 5 °C to +35°C/41 to 86°F.

Avoid applying on extremely hot surfaces.

CONSUMPTION

Consumption app.200 ml/m² depending on the absorbency and the condition of the substrate. Coverage rates are a guideline only and can variate.

CLEANING

Tools should be cleaned with clean water after use.

PACKAGING

1 litre / 20 litre drums, 200 litre, 1000 litre Tank

STORAGE

3001 Concentrate can be stored in tightly sealed original containers for at least 24 months, if kept dry and at moderate temperatures.

It is important to reseal containers tightly after use. Store in a cool, dry place and protect from heat, freezing and direct sunlight.

Diluted formulations typically remain stable and suitable for application for 6 month. If stored over longer periods, the formulation may separate. In this case, the formulation must be vigorously stirred before application.

In the case of longer storage of the diluted formulation, bacterial contamination becomes more likely. In this situation, the addition of an appropriate anti-algae agent during the initial dilution may be necessary.

PRECAUTIONS

READ ALL SAFETY DIRECTIONS AND WARNINGS ON PACKAGING BEFORE USE. REFER TO MATERIAL SAFETY DATA SHEET FOR HANDLING PROCEDURES.

3001 Concentrate is not classified as dangerous goods. Adequate protective personal equipment should be used. Please read the Material Safety Data Sheet.

The information, and, in particular, the recommendations relating to the application and end-use of the products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

Technical information and services are freely available from the Web site www.nanovations.com.au

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