

Concentrated Water and Dirt Repellent Surface Treatment for Fabric

DESCRIPTION

Nano-Protex 4004 is a water-based hydrophobic self-assembling treatment for water absorptive fabric and textiles.

The product creates a high contact angle against water and shows a very effective water/liquid repellent effect. An easy to clean surface effect is created.

The product is suitable as a surface impregnation for external fabric and textiles.

4004 dries up transparent, so there is no visible change to the surface. It preserves the breath ability of the substrate. The treated surface is guarded against contamination from dirt, dust and atmospheric pollution. Dirt can be removed easy by rain or by rinsing with clean water by the use of a mild cleaner.

On external surfaces, moss and algae formation is significantly reduced. The hydrophobic treatment is resistant to UV and temperature changes.

The weather resistance and the invisible appearance of **4004** mean that it can be used for internal and external areas. **4004** is unsuitable for fabric and textile material that is already coated with a water repellent.

RECOMMENDED FOR

4004 concentrate diluted can be used for the water repellent treatment on following substrates:

- Fabric and Textile
- Tents ,
- Awnings
- Soft-tops on Cars
- Outdoor and indoor furniture
- Shoe textile and leather Suede type

FEATURES & BENEFITS

- **Water based, environmentally friendly**
- **Water repellent, Easy to Clean Effect**
- **Good penetration into porous surfaces**
- **Excellent moisture regulation**
- **Economical, outstanding coverage rate**
- **Permeable to vapour**
- **Invisible**
- **Zero VOC , odour free**

SPECIFICATIONS

Supply form	Liquid
Colour	Milky,
Density	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, stains and coatings.

Standard surface preparation can be used. Dirt and algae invested substrates should be cleaned with suitable cleaner or pressure water. Water pressure must be suitable for the substrate.

PRODUCT PREPARATION

Dilute 1 part Nano-Protex 4004 with 4 parts of clean water. Higher dilution rate may be possible on light fabrics only. This needs to be tested individually.

Use water that is low as possible on mineral content, or is filtered or demineralized. Mix only in clean plastic containers. Mixed product can be stored for a maximum of 6 months in cool conditions, not above 25 °C. We recommend only diluting the amount of product you need.

For supply in pre-diluted packaging, like aftermarket ready to use spray bottles for example, please contact the Nanovations for required modification for shelf live extensions.

APPLICATION

The surface must be dry. The best suitable application is usually a fine mist sprayer , or if larger areas need to be treated a pressure pump sprayer or an Airless pump sprayer.

Appart from spraying, dipping, and flow coating, it is also possible to add the product to a washing machine. In that case a rinse cycle should not be used and the treated items should be dried in a cloth dryer after.

Before the application on large surface areas , trials should be conducted to determine the optimum application method.

It is very important to apply a significant amount to the substrate. When sprayed , two coats wet on wet must be applied to ensure full coverage. The substrate must be treated to be wet to touch. The product will penetrate slowly and completely into the surface. Product puddling on the surface during the application should be avoided. Vertical surfaces should be treated from the ground up. Avoid application in high wind situations especially if larger areas are treated. Overspary should be avoided , keep spray head close as possible to the surface to be treated.

The product always should be testet on a small area first for suitability.

Don't apply in bad weather conditions. Impregnation needs to have the possibility to dry completely before it can get wet.

Nano-Protex Concentrate 4004



CURING

First results will be visible after the treated surface is completely dry.

During application and drying, the temperature should not drop below +4°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, and absorption of the substrate.

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

Curing can be forced by hot air, Infra-Red lights and other methods that are suitable for the substrates. Clothes dryers can be used as well.

CONSUMPTION

Consumption is app.50 -200 ml/m² depending on the absorbency and the condition of the substrate. Coverage rates are a guideline only and can vary.

CLEANING

Tools should be cleaned with clean water after use.

PACKAGING

Standard sizes are 1 litre / 20 litre drums.
Larger container on request.

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

Sydney Office:
Nanovations Pty Ltd
Ph. +61 2 9975 5602
Email info@nanovations.com.au
Web site www.nanovations.com.au

STORAGE

4004 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.

Do not store in or use metal containers for the application and product handling. Use plastic containers only.

In the case of longer storage diluted bacterial contamination becomes more likely. In this situation, the addition of an appropriate anti-microbial agent during the initial manufacturing may be necessary. Please contact Nanovations. For the diluted concentrate storage life is 12 months, if prepared correctly.

PRECAUTIONS

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

4004 is not classified as dangerous goods. Adequate protective personal equipment should be used. Please read the Material Safety Data Sheet.