

# NS67 WR

NANOTECHNOLOGICAL WATER REPELLENT  
FOR SURFACE PROTECTION



**Breathable water repellent product for porous and cement surfaces**

#### COMPOSITION

Water based, milky nanotech emulsion, PFAS free

#### MAIN CHARACTERISTICS

Water repellent, breathable, not film forming, UV resistant, environmentally friendly



1 L



5 L



10 L

#### PROPERTIES AND BENEFIT

NS67 WR is a water-based nanotechnological product, water repellent, breathable, not film forming, for porous surfaces, PFAS free. **Its formulation acts very differently**, when compared to any two component (2K) or silicone-based formulations, as it does not create a “plastic film” on the surface applied.

NS67 WR protects and makes surfaces water-repellent by penetrating deeply into the pores of the substrate, while maintaining the breathability properties: **instead of sealing the pores, nanoparticles coat them, assuring that water or other corroding factors are effectively repelled by chemical forces**. So, protection is provided deeply into the substrate which is therefore not affected by climate change and by freeze-thaw cycle events.

#### SURFACES LAST LONGER

As nanoparticles do not form polymer chains, NS67 WR treated surfaces can last longer. **Treated surfaces are more resistant to sun's rays (UV radiation)**, avoiding the “yellowing” effect typical of old generation polymer-based products.



Nanotechnology for cement surfaces, mortar, grout, stucco and natural or artificial stones



Rising damp protection to increase the durability of the surface



Prevents growth of algae, mould and microorganisms



Prevents white spots and salt deposits (efflorescence)



Easy surface application by roller, brush or spraying



Treated surface becomes water repellent while retaining high breathability without change of natural appearance

#### Please read carefully:

Do not leave residual material and remove the excess with a cloth or paper. On vertical surfaces, do not exceed the quantity of product applied to avoid dripping; if this should happen, immediately clean up the excess product. Always do a test on a small portion to evaluate any reactions or aesthetic changes.

## DESCRIPTION

NS67 WR is a water based, liquid formulation, developed and produced by Nanosilv, that provides effective waterproofing and protection of a wide range of porous surfaces such as: cement, natural and artificial stones, bricks, concrete, mortar, grout, stucco.

**Its high fluidity, similar to that of water, allows the nanoparticles to penetrate deeply into capillaries, that no old generation products, such as elastomer or polymer-based products, can reach because of their aggregation on the surface.** In this way, nanoparticles (that coat the pores), become integral part of the materials, offering them new properties: in fact, nanoparticles change the surface tension, making the material water-repellent. With these innovative materials, surface films are no longer added, but a new generation technology (KETs - Key Enabling Technologies) is implanted which gives the material new properties and capabilities. It is easy applied by roller, brush or spraying.

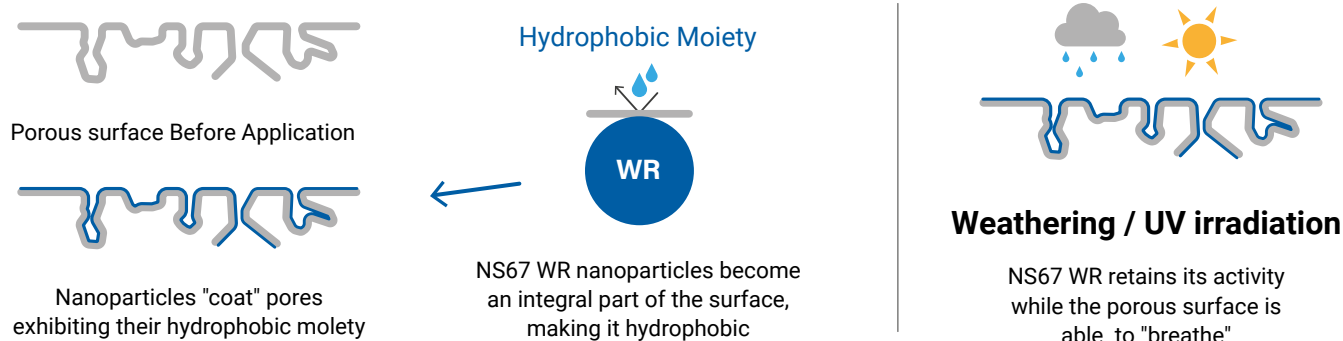
The nanotechnology-based composition assures effectiveness, prolonged lifetime without changing the original appearance of the surfaces (depending on the nature of the surface).

## WATER REPELLENT BUT BREATHABLE

NS67 WR, modifying the surface tensions, creates a water barrier on the material itself, retaining its "breathability". Rising humidity or water loss that occurs behind a NS67 WR modified surface, can evaporate through the open pores to the environment, relieving the capillary pressure.

In this way, **swelling, cracking, and warping of material are prevented. Moreover, NS67 WR modified surfaces remain dry and unchanged in both appearance and mechanical properties.**

## NS67 WR PROTECTION



## APPLICATION

The application surface should be dry and clean. In case of mould and lichen, treat the surface with NS67 MUFFA. Wash with a pressure washer. After washing, wait for a complete drying. Apply NS67 WR by using a brush, roller or spraying. On very absorptive surfaces the product can be diluted 1: 1 (maximum ratio). On very absorptive surfaces, apply by spraying and re-apply the product wet on wet. NS67 WR makes the treated surfaces hydrophobic, with a static contact angle of 90° (Standard: **TAPPI T458 ASTM D724 ASTM D5946**, 4 µl drop, 7 days after application).

## CONSUMPTION

Estimated yield on the surface: 8 m<sup>2</sup>/L, strongly dependent on the degree of absorption of the surface.

*The correct application of the product is the sole responsibility of the user. Any visits or site inspections by Nanosilv staff are intended to provide technical application recommendations, but in no case to inspect the construction site or perform quality checks on behalf of Nanosilv srl.*

### PRECAUTIONARY STATEMENTS

*Keep out of reach of children. Do not reuse container. Avoid contact with skin and eyes. In case of skin contact, wash off with soap and plenty of water. Never use solvents or thinners. In case of eye contact, rinse thoroughly with plenty of water, seek medical assistance. If swallowed, seek immediate medical assistance and show container or label to the doctor in attendance. Do not let product enter drains. Dispose of containers contaminated by the product in accordance with local or national legal provisions. Before use, read and understand the Safety Data Sheet.*

### LIMITED WARRANTY INFORMATION - Please read carefully.

*The information contained herein is true and correct to the best of Nanosilv's knowledge. Final determination of the suitability of the material, in relation to the specific use of the product, is the sole responsibility of the user. Nothing herein should be interpreted as a warranty. Since conditions and methods of use of our products are beyond our control, observing applicable law or regulation is the sole responsibility of the user. Nanosilv disclaims liability for any incidental or consequential damages. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.*

## ITEM SPECIFICATIONS

Water-repellent treatment for porous surfaces, such as natural or artificial stone, concrete by applying a water-based and breathable nanotechnological formulation, the application surface must be dry and clean.

Apply the product with a brush, roller or spray.

It can be diluted for clay surfaces.

The product must reduce water penetration greater than 89%, reduction of water loss: greater than 95%.

Loss of permeability: = 4%.