

SELF-CLEANING WINDOWS

Presentation, datasheet and operating instructions

Product Description: NanoProtection SELF-CLEANING WINDOWS is a nanotechnology-based product that protects windows from external aggression. The product forms an invisible nano-hydrophobic layer. Water pearl and dirt adhere less.

Examples of Use: Ideal treatment product for:

1. Roof windows
2. Outside windows
3. Verandas
4. Pool shelters...

Product Characteristics:

Important Hydrophobia (Contact angle > 105 °)
Anti-adherent properties
Excellent effect "easy to clean"
Compatible with food contact

Other properties:

Invisible to the naked eye (coating thickness: 100-150nm)
Permanent (UV Stable, huge abrasion resistance)
Resists temperature fluctuations
Simple Application
Important chemical resistance (except for elevated PH > 13)

Use:

Application Conditions: Apply the product at temperatures between + 5 °c and + 30 °c.

Do not treat in direct sunlight. Treat in small areas if temperatures are at 30 °c. Do not treat below 0 °c. The treatment should be applied under conditions of air humidity and normal temperatures. Contact with water and/or pollution on the surface to be treated will affect the quality of the treatment.

Surface Preparation: The surface must be free of all coarse and visible pollution, such as impurities, traces of limestone and dirt.

IMPORTANT: To ensure optimum results, it is imperative that the surface is perfectly clean before applying the treatment. For persistent limestone traces, use our NanoProtection ANTI LIMESTONE Or a commercial anti-lime product. Then use our GLASS AND CERAMIC CLEANER. Refer to the technical data sheet corresponding to this cleaning product.

The use of NanoProtection GLASS AND CERAMIC CLEANER is necessary because the glass must be free of any fat, silicone and wax. The use of a conventional product based on active surfactants, oily detergent, will prevent nanoparticles from attaching properly to the surface.

Tips for use: Shake well before use. Wearing gloves is recommended. After pre-cleaning, make sure that the surface is dry before applying the treatment.

Spray evenly SELF-CLEANING WINDOWS directly on the surface. Using a soft cloth or paper towel, spread the product with circular movements, then coarsely polish the surface with another clean cloth until there is no more

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sail to remove the product. At this point if there are traces left, do not insist and wait until the product dries (read more). Do not touch the surface, or contact water or cleaning agents for about 30 minutes. Full drying occurs after 24h. The hydrophobic effect can be tested after 30 minutes (by pouring water, it must bead), the easy to clean effect will only be tested after 24h (do not rub the surface during this time).

Note: If you notice slight white traces or a veil after drying, this is due to the extra product, which will be removed very easily with a wet sponge with a large water.

Amount of Use: Approx. 10ml/m² in manual application.

Maintenance of treated surfaces: The treated surface is very easy to clean with water. The use of maintenance products is no longer necessary.

If you still want to use a cleaning product, the only recommended cleaner is the **CLEANER UNIVERSAL**, because it is devoid of detergents or surfactants. The use of other products will not alter the treatment (unless high PH) but may leave residues that will create an invisible film decreasing the hydrophobic effect. Even if the treated surface is dirty (deposits of limestone, dirt, fats...), the hydrophobic effect can be reduced. A simple rinsing with water by rubbing lightly with the hand or a rag makes it possible to instantly find the original hydrophobic effect.

Duration of Action: The treatment is active for several years under normal use and abrasion conditions, and without the use of aggressive products to clean the treated surfaces. The maximum duration is 5 to 6 years on an external glass (exposed to UV).

Advantages of this product compared to other Nano products on the market:

1. **Permanence and Durability:** UV stability allows the treatment to keep all its features for many years, approximately the lifetime of the support. Many competing products are damaged by natural light.
2. **Abrasion resistance/Easy to clean effect:** a permanent chemical bond between the product and the treated surface allows excellent abrasion resistance. Many competing products are easily altered by abrasion.
3. **Chemical Stability:** The product is resistant to almost all household or industrial cleaners (except concentrated detergent). Many competing products must be reapplied after cleaning the surface.

Conservation: Storage for 2 years in its original packaging without opening. Store in a Place between + 5 °c and + 25 °c. Store away from solar radiation. Close the opened containers well.

Physical and chemical characteristics:

Ph: 2. **Form:** Liquid. **Smell:** Alcohol. **Color:** Colorless.

Hazardous Products Regulations: **NanoProtection SELF-CLEANING WINDOWS** is easily flammable and irritating to the eyes and skin.

For further information please also consult our Safety data sheet. These application recommendations are based on our experience and extensive research, but they do not release the user from testing the product before an application. **NanoPro** guarantees the quality of its products but expressly disclaims all liability in the event of non-compliance by the user with the recommendations and conditions of use of the said products, in particular but not exclusively in the event of a defect in application, Non-qualified personnel from the use of products not compatible with the products of the company **NanoPro** or bad weather conditions. We disclaim all responsibility for any use or application other than those specified in written form on our part. For more information, see the Safety data sheet.

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