

## Technical Data Sheet: GLASS, CERAMIC & MIRROR TREATMENT

Product Description: GLASS & CERAMIC Treatment is a nanotechnology-based product designed to give smooth surfaces in the home (such as glass/ceramic) anti-adhesive properties, preventing dirt from adhering to treated surfaces. The hydrophobic and oleophobic properties of the coating reduce the adhesion of impurities such as grease, oil, atmospheric pollution, greatly facilitating the cleaning of the treated surface: this is the "easy to clean" effect. Even dried limestone deposits are easily removed.

### Examples of use:

- Bathroom / Kitchen (Glass/Window, Ceramic, and Mirror)
- Road and recreational vehicles (AQUAPEL glass)
- Indoor or outdoor
- Floors (ceramic tiles)
- Solar panels

### Product Characteristics:

Significant hydrophobicity (contact angle > 105°)

Anti-adhesive properties

Excellent "easy to clean" effect

Food contact compatible

### Other properties:

Invisible to the naked eye (coating thickness: 100-150nm)

Permanent (UV stable, highly abrasion resistant)

Resistant to temperature variations

Simple application

Significant chemical resistance (except for pH >13)

**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 >30°C. Do not treat below 0°C. The treatment should be applied under normal air humidity and temperature conditions. 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 from all coarse and visible pollutants, such as impurities, lime traces, and dirt.

**IMPORTANT:** To ensure optimal results, it is imperative that the surface be perfectly clean before applying the treatment. For persistent lime traces, use our LIMESCALE REMOVER or a commercial limescale remover. Then, use our DECONTAMINATING CLEANER.

Refer to the corresponding technical data sheet for this cleaning product.

The use of DECONTAMINATING CLEANER is necessary because the surface must be free from any grease, silicone, and wax. The use of a conventional product containing active agents, greasy-based detergent, will prevent the nanoparticles from properly adhering to the surface. Alcohol allowed on new surface only.

## Technical Data Sheet Continuation

**Instructions for Use:** Shake well before use. Wearing gloves is recommended. After pre-cleaning, ensure that the surface is completely dry before applying the treatment. Spray GLASS, CERAMIC & MIRROR Treatment evenly directly onto the surface. Using a soft cloth or paper towel, spread the product with circular motions, then polish the surface with another clean cloth until there is no haze left, to remove excess product. Do not touch the surface, or allow it to come into contact with water or cleaning products for approximately 30 minutes. Complete drying occurs after 24 hours. If haze persists at this stage, remove it by rubbing with a sponge saturated with water. The hydrophobic effect can be tested after 30 minutes (by pouring water, it should bead), the easy to clean effect can only be tested after 24 hours (do not rub the surface during this time).

*Usage Quantity: Approx. 5-10ml/m<sup>2</sup> for manual application.*

**Maintenance of Treated Surfaces:** The treated surface can be easily cleaned with water. The use of cleaning products is no longer necessary. If you still wish to use a cleaning product, the only recommended cleaner is UNIVERSAL CLEANER, as it is free from detergents or surfactants. The use of other products will not alter the treatment (except for high pH) but may leave residues that will create an invisible film reducing the hydrophobic effect. Similarly, if the treated surface becomes soiled (limescale deposits, dirt, grease...), the hydrophobic effect may diminish. A simple rinse with water while lightly rubbing with the hand or a cloth will instantly restore the initial hydrophobic effect.

**Duration of Action:** The treatment is active for several years under normal usage and abrasion conditions, and without the use of aggressive products to clean treated surfaces. For example, the treatment can last around ten years on a shower wall, 1 to 2 years on an exterior window (exposed to UV).

ADVANTAGES of this product compared to other nano products on the market:

**Permanence and longevity:** UV stability allows the treatment to retain all its functionalities for many years, approximately the lifespan of the substrate. Many competing products are damaged by natural light. Abrasion resistance / easy to clean effect: A permanent chemical bond between the product and the treated surface allows excellent resistance to abrasion. Many competing products are easily altered by abrasion. **Chemical stability:** The product resists almost all household or industrial cleaners (except concentrated detergent). Many competing products must be reapplied after cleaning the surface.

**Storage:** Store for 2 years in its original unopened packaging. Store in a place between +5°C and +25°C. Store away from sunlight. Close opened containers tightly.

**PHYSICAL AND CHEMICAL CHARACTERISTICS:** PH: 2. Form: Liquid. Odor: Alcohol. Color: Colorless.

Hazardous Products Regulation: GLASS, CERAMIC & MIRROR Treatment is highly flammable and irritating to the eyes and skin. For further information, please also refer to our safety data sheet. These application recommendations are based on our experience and extensive research, however, the user is still required to test the product before application. NanoPro guarantees the quality of its products but expressly disclaims any liability for user non-compliance with the recommendations and conditions of use of said products, including but not limited to, improper application, application by unqualified personnel, use of products not compatible with NanoPro products, or adverse weather conditions. We disclaim all liability for any use or application other than those specified in writing by us. For more information, request the safety data sheet.