

## How to use: TECNADIS SELFCLEAN ULTRA Superhydrophilic treatment for glass surfaces

### PRODUCT DESCRIPTION

# Superhydrophilic coating for glass surfaces



The product is solvent-based: it is recommended to keep it on its original container unopened until the moment of the application. Once opened, be sure to keep it in the original container properly closed in order to guarantee its properties.

### HOW TO USE IT

#### STEP 1. PREPARING THE SURFACE

To have the surface prepared for the application of the coating, the glass surface must be **completely clean and dry**.

Depending on the degree of soiling of the glass to be treated, cleaning methods of different intensity are recommended. Concretely, for a conventional cleaning can be used common products such as alcohol-based ones, water and soap, etc. However, in the case of severe lime deposits or similar, the use of specific abrasive-type products with micro-particles is recommended, helping to extend them from a scouring pad or even mechanical means such as polishing for large surfaces.

Normally, you can help to remove this type of polishers with a "T" type cleaning system and spraying the surface with water. Finally, cover the entire surface with ethanol and dry until total transparency.

It is also not recommended that the glass to be treated shows surface effects such as hydrophobicity, since the distribution of the product might not be optimal. In this case, it is also recommended to remove this previous effect using abrasive type products according to the usage guidelines of the respective manufacturer.

## STEP 2. APPLICATION

### 1) RECOMMENDED TOOLS:

For maximum product transfer, good surface distribution and dosing control, it is recommended the use of "Trans-Tech" paint spray gun with feeding filter.

\*For these guns a compressed air intake is required, it can be of fixed installation or also a portable compressor with an air flow capacity of at least 6 bar:

AIR GUN: REFERENCE MODEL		
NOZZLE	Hole size	0,85 mm
HEAD	Head shape	Elliptical or equivalent
TYPE	Trans-Tech, with feeding filter: 200 microns	



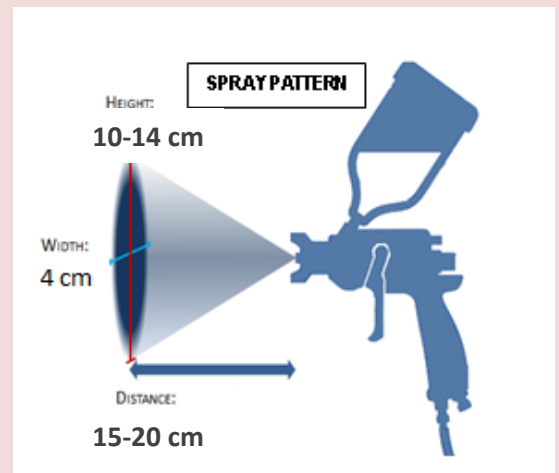
COMPRESSOR: REFERENCE MODEL	HP	Lts	Lts / min	kg	Bar
Recommended parameters	2 - II	50	220	35	5

Important: Place a desiccant filter in the compressor to avoid water condensates

### 2) GUN CALIBRATION:

To calibrate the gun, adjust the spray pattern and the amount of product per time unit (ml/min) to the values below, in order to assure an approximated yield of 40 ml/m<sup>2</sup> (25 m<sup>2</sup>/L). The product outlet fan should be open to the maximum, the regulation of the product outlet flow to 8 ml in 9 seconds (53 ml/min) approx. and the air outlet open at maximum.

GUN: CALIBRATION PARAMETERS		
DISTANCE TO THE GLASS		15-20 cm
ATOMIZATION		Medium
SPRAY PATTERN	Width	4 cm
	Height	10 - 14 cm
AMOUNT OF PRODUCT	Per unit of area	Approx. 40 ml/m <sup>2</sup>
	Per time unit	Approx. 65-70 ml/min



### 3) SPRAYING:

Spray the product on the glass, avoiding possible excesses and product's sags. In case of indoor applications, it is recommended ventilate well the place where the application is taken place (see Recommendations for the application in page 3).

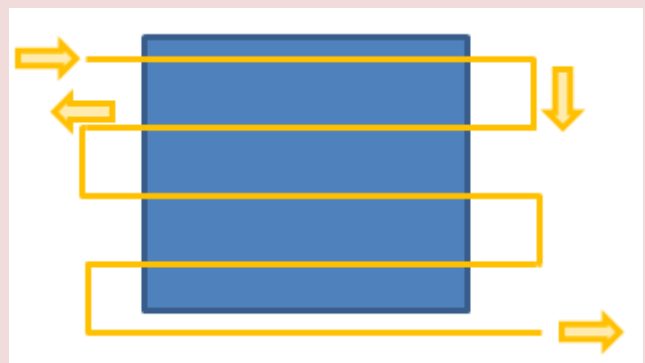
As standard application it is recommended to apply **only one covering** or layer of product. Approximated performance: 40 ml/m<sup>2</sup> (25 m<sup>2</sup>/L).

#### How to apply:

It is recommended to start spraying outside the surface to be treated, in order to avoid accumulation of the product in the starting area.

For a proper application, follow the instructions with the help of the diagram on the right:

- Direct the gun in "strokes" or longitudinal stripes maintaining a uniform speed, so that 1 m longitudinal be flown in approximately 3 seconds (0,33 m/s).
- Start the application of each stroke from outside the surface to be applied so that we ensure the product reaches the entire surface to be treated.
- Keep on covering the entire surface overlapping the strokes 5 cm aprox. and totally covering by troughall the areas in order to obtain a uniform coating and not have zones without applying.



## RECOMMENDATIONS FOR THE APPLICATION

It is recommended to use appropriate PPE for handling this type of product (see product's MSDS). For indoor applications, it is recommended to keep well ventilated the place during application of the coating and also few hours after the treatment. It is recommended not to stay in the room where the treatment is applied to people unaware of application works, during it and few hours later. It has a characteristic odour during the next few hours until total ventilation.

Minimize as much as possible the presence of contaminants in air currents during application and during subsequent minutes, until treatment is dry.

## TREATED SURFACE DRYING AND EFFECT CHECKING

Drying at room temperature and superhydrophilic effect are basically immediate. It is convenient a dust-free environment while drying, in order to prevent the arising of imperfections in the surface. Ensure not to provide abrasion or any cleaning processes during the first 24 hours.

In order to verify its correct application and the hydrophilic effect of the treatment on the glass, an initial test can be carried out after approximately 30-60 minutes after the application by pouring water on it (in a small área of the glass) and checking that it slides forming a film in a homogeneous way through the glass surface.

## CLEANING OF THE TOOLS USED

Cleaning the tools used for product application (including the air gun) is recommended to be carried out before the product gets dry, using to that purpose alcohol-based solvents (like ethanol). In case the product is already dry, use stronger solvents for cleaning, like universal solvent or acetone (with the proper cautions).

## HOW TO CLEAN THE TREATED GLASS

Once the coating is totally dry (24 hours), the glass treated with Tecnadis SELF CLEAN ULTRA can be cleaned with conventional cleaners (based in alcoholic solvents and surfactants). It is not recommended to clean the surface with highly abrasive cleaners, since they may scratch the coating.

## HOW TO REMOVE THE TREATMENT FROM GLASS

In case you want to remove the treatment of Tecnadis SELF CLEAN-ULTRA, if it is fresh / recently applied (maximum 1 hour approximately after application), use an alcohol.

In case you want to remove the treatment of Tecnadis SELF CLEAN-ULTRA, if it is NOT fresh / recently applied (after approximately 1 hour after application), it is recommended the use of commercial abrasive cleaners.

## INSTRUCTIONS FOR HANDLING

The security information of the product needed for its use without risks is not included in this document. Before manipulating the product, read carefully the Material Safety Data Sheets and the labels for a safe use and to be aware of physical and health risks. The MSDS are available and are provided by TECNAN S.L. Application of the product should be carried out in a properly ventilated place. It contains volatile solvent (ethanol).