

## **EC-211**

### **Hydrophobic/ Easy to clean Nano-coating for Glass Surfaces**

**Easy to clean and improved hydrophobicity on the top of glassy surfaces due to presence of nanoparticle.**

**Glass surfaces on the building facade Glass Doors Car windows Glass surfaces in sanitary environments**

#### **Coating Description**

Glass may appear to have a smooth surface but in fact possesses a microscopically pitted surface prone to the attraction and imbedding of dirt, grime, dust, bacteria and other deposits.

Untreated glass surfaces will invariably deteriorate over time as dirt and these other deposits get lodged into the surface. The glass becomes more and more dirty, opaque and harder to clean.

**EC-211** is easy to clean, alcohol based protective coating and containing silane based nano particles for application on glass surfaces and other smooth surfaces such as metals and ceramics.

Glass absorbs quickly contaminations. A few drops of rain and slightest contact with an infected hand, are sufficient to contaminate the glass surface. This may be not very important for the glass window of a multi-storey residential house, but it is a significant problem for tall buildings.

Always, there are dust, rain, air pollution and many other items that cause erosion and dirty of glass facades. This type of nano-solutions provides waterproof and durable surfaces which are resistant against corrosion, erosion and friction.

The glass coating **EC-211**, which is placed as a thin layer on the glass surface, creates roughness in the micro and nano sizes, reducing the interfacial adhesion between the glass surface and water drops. In the other words, self-cleaning property is created for the glass by increasing the hydrophobic effect.

#### **Features and Benefits**

- Water repellent
- Guttering water on the surface
- Create visibility on wet surfaces
- Clear, colorless liquid
- Contains alcohol for a durable coating
- Chemical resistant
- Abrasion resistant
- UV-Stable
- Drastically reduces cleaning frequencies

**EC-211** is a transparent shield that is applied to any glass surfaces, giving it a hard and durable water repellent and self-cleaning surface. The invisible coating helps to prevent water marks, dirt, algae and bird fouling from adhering to glass.

Dirt particles can be picked up by water droplets due to a complex micro- and nanoscopic architecture of the surface, which enables minimization of adhesion. This form of glass works in a similar way to "Teflon" on a frying pan. It produces a non-stick surface and water will run off of this surface quickly and not streak.

**EC-211** is also incredibly durable and is suitable for both interior and exterior applications. The glass coating protects external windows, commercial facades, rooftops, pool surrounds and balconies.

**EC-211** eliminates the need to use harsh chemical cleaners on the glass. This Eco-friendly property saves thousands of gallons of chemical waste polluting our water and earth.

**EC-211** is in use every day by industry professionals, window cleaners, glass installers, shower installers and the private household user.

### **Typical Product Data Property**

Appearance	Clear, liquid
Density, 25 °C	Approx 0.82 g/cm <sup>3</sup>
pH-Value	Approx. 5
Solvent	Alcohol

### **How to apply the self-cleaning glass coating EC-211**

First, clean and dry the surface completely. Shake well container solution. Then, spray a low amount of solution on the surface. Note that hydrophobic glass solution after spraying on the surface must be immediately dispersed on the surface using a clean and dry cloth or sponge. If there is a delay in the solution dispersion, white particles as dandruff may be formed, in which case the coating has not properly been applied. Each liter of this solution covers more than 40 meters of the surface of glass or other smooth surfaces.

After applying, since the solvent of this product is alcohol, it may be formed streak spots on the glass surface. In this case, clean the surface using a slightly damp cloth after 1 to 24 hours (The time required for coating stability).

The time required for coating stability is between 1 and 24 hours.

Avoid from applying the nano-coatings to the surface in cold weather below 20 °C.

### **Storage**

The solution container must be stored at a temperature of 10 to 30 °C.

Since the solvent of this solution is alcohol, avoid keeping open the solution container.