



**NANOTEC-USA**

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## ***NANOBIONIC Nanotechnology***

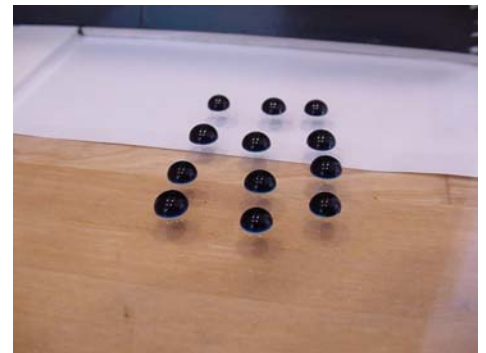
### **Aeroguard-Plastic**

#### **Nano-hydrophobic Plastic protection**

##### **Product:**

**NANOTEC Aeroguard-Plastic** is a special Nanotechnology product engineered for Aerospace and Military applications with a long-term effect on Plastic surfaces. This is not a sealer that forms a barrier but rather is a modification of the surface chemistry on a molecular level to provide a permanent easy to clean and protective surface. The hydrophobic product works by repelling water and prevents adherence of foreign matter on the surface. (**Easy to Clean/self-cleaning effect**). An ultra-thin and invisible coating is applied to the Plastic surface. Due to the hydrophobic treatment effect, dirt particles cannot penetrate the matrix of the surface. The Nano-Particles adhere directly to the substrate molecules, deflecting any foreign matter. Water runs off easily from the treated surface and dirt particles are washed off by rain or when rinsed with a strong water spray.

- **Bug remains are easier to remove**
- **Water and Mud repelling, Dirt and Dust-deflecting**
- **Easy to clean/self cleaning effect**
- **Weather protection, less de-icer needed**
- **UV - weather-resistant**
- **Better aerodynamics/Laminar air flow**
- **Reduces maintenance costs**
- **May reduce fuel costs and adds no weight**
- **Stops Salt and Calcium damaging**
- **Long-lasting.**



Colored water on Nano-refined Aviation Acrylic substrate.

In a microscopic level Plastic is not completely smooth, so water and dirt on the surface can build up easily.

**NANOTEC Aeroguard-Plastic** allows the dirt in combination with water simply to wash off and provides a clean surface.

**NANOTEC Aeroguard-Plastic** protects the Plastic surfaces against getting dirty and significantly reduces the build up of lime deposits on Plastic surfaces. The product is hydrophobic, stops salt build up, is resistant to friction and temperature changes. The treated surface is guarded against new contamination from dirt, dust and atmospheric pollution. Dirty water cannot settle into the Plastic surface. The coating is very long lasting.

**NANOTEC Aeroguard-Plastic** is UV stable. It cannot be removed by water, cleaning agent or with high pressure equipment. **NANOTEC Aeroguard-Plastic** guarantees that the surface retains its original clarity. Surfaces treated with **NANOTEC Aeroguard-Plastic** are very easy to maintain.

## Ranges of application of NANOTEC Aeroguard-Plastic

Aviation Acrylic and Polycarbonate Transparencies to include in cabin (head leaner) thin windows, Carbon fibre and other polymer substrates, display screens to include Anti-Reflection coated glass LCD Displays. Uses inside the cabin can include the plastic interior walls, seat frames, anything plastic you want to make easier to clean/self-cleaning.

In situations where there is no water or rain, the product will provide an easy to clean and protected surface.



### Applying NANOTEC Aeroguard-Plastic

It is to be noted that older surfaces must be thoroughly cleaned with water, high pressure water jet or steam cleaned (possibly in connection with our Soft Polish or Rapid Polish). The substrate must be completely dry before application. Solvent and acid cleaners must be neutralized before one applies NANOTEC Aeroguard-Plastic. It is important that there are no residues from the cleaner itself on the prepared surface.

Now apply NANOTEC Aeroguard-Plastic with a dry and clean cotton cloth or a soft paper towel on the clean and dry substrate and polish it in at the same time. The application takes place in a processing step, whereby the coating is to be sprayed on and wiped on. Alternative the product can be sprayed directly on to the cloth and wiped on.

Don't apply more NANOTEC Aeroguard-Plastic than the surface can absorb. Coating splashes on adjacent surfaces, not to be treaded should be avoided. Repeat the application after a short drying between 2 and 15 min.

The product should not be applied in wet or cold weather.

**Important:** The NANOTEC Aeroguard-Plastic solution should not be visible after the final polish. After 24 hours the optimal protective effect is reached. However, the treated surface is rainproof after 1-hour.

NANOTEC Aeroguard-Plastic can be sprayed on with special professional spraying devices, the finest mist/droplet size is required, must still be polished in. **A dry air system is mandatory when using a supplied air spray device, or the moisture in the air supply line will contaminate the Nano-treatment.**

**Important!! Please pay attention to all details in our instruction.**

**Environmental protection:** Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made for waste.

### Consumption:

For manual application you will use between 5 ml and 20 ml for each m<sup>2</sup> of surface (1 litre will cover 50-200 square meters).

Consumption with professional spraying devices (depending on the absorbency of the substrate) is between 5 and 15 g per square meter.

### Duration of storage:

Can be stored in the original sealed packaging for at least 12 months. Storage conditions should be dry and warm (between 10° and 20°C).

After opening the container NANOTEC Aeroguard-Plastic should be used quickly.

### First Aid:

Read the Material Safety Data Sheet.(MSDS)

If swallowed, rinse mouth thoroughly with water immediately.

DO NOT induce vomiting. Seek medical advice.