



Future Coat Technology

NANO-SHIELD

TECHNICAL INFORMATION

NANO shield is a special nanotechnology product with a long-term effect on gold & E-coat 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 mater on the surface (**Easy to Clean/self-cleaning effect**). An ultra-thin and invisible coating is applied. 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 water. In a microscopic level gold is not completely smooth, so water and dirt on the surface can build up easily.

A Nano shield allows the dirt in combination with water simply to wash off and provides a clean surface

Nano shield protects the gold surfaces against getting dirty and significantly reduces the build up of lime deposits on gold. The product is hydrophobic, and is friction and temperature changes. The treated surface is guarded against new contamination from dirt, dust and atmospheric pollution. Dirty water cannot settle into the gold surface. The coating is very long lasting.

Nano shield is UV stable. It cannot be removed by water, cleaning agent or with high pressure equipment. Nano shield guarantees that gold keeps its original clarity. Surface treated with Nano shield are very easy to maintain. Ranges of application of Nano shield Gold, jewellery, cutlery. In situations where there is no water or rain, the product will provide an easy to clean and protected surface.

Properties:

Nano shield clear is a coating with the following properties:

Water-repelling

Dirt-deflecting

Easy to clean

Oxidation protection

Tarnish protection

UV-weather-resistant

Long-lasting

Setup-

350 Gms of Nano coat with a 650gms of water.

Working conditions:

Applying Nano shield- it is to be noted that older surfaces must be thoroughly cleaned with water jet or steam cleaned. The substrate must be completely dry before application. Cleaned gold must be neutralized before one applies Nano shield it is important that there are no residues from the cleaner itself on the prepared surface.

Important- The Nano shield solution should not be visible after the final polish. After 24hours the optimal protective effect is reached however the treated surface is rainproof after 1-hour Gold shield can be sprayed on with special professional spraying devices.

The application is made by dip-spin procedure with dilution.

Dipping Time: 10-20 sec

Afterward: Spin-dry

Baking temperature: 150°C - 160°C

Baking Time: 20 – 30 minute

P^H : 8.5 – 9.5 (P^H should be maintained by adding 25% Ammonia
Solution)

Productivity:

With 1 kg Nano shield approx 15 – 30 m² can be coated

Duration of storage:

Can be stored in the original sealed packaging for at least 12 months. Storage conditions should be dry and warm (between 20° and 30°C).

After opening the container Nano shield should be used quickly.

