Anti-bacterial coating
NANOCOAT® - ANTI-BACTERIAL COATING

Nanocoat® is the registered trademark of an antiviral, antibacterial and antifungal surface treatment of aluminum door and window handles. The treatment process and end-product is intellectual property (IP) protected and unique in its kind as it works on 3 levels at the same time: antiviral, bacterial and fungal.

BETTER BE SAFE THAN SORRY

The number of people who acquire an antibiotic resistant bacteria grows each year, and the number of deaths from these infections is also growing. In Europe, it is estimated that 25.000 people a year die from antibiotic resistant infections. Infections can be spread in numerous ways. The fastest way is by contact with an infected person or an infected surface.

In a joined effort between Sobinco, daughter company STA and the biogenetic laboratories of the university of Coimbra (Matera, Portugal), we have developed a surface coating to prevent the spread of bacteria, fungi and viruses via infected surfaces of so called high-traffic objects, such as door and window handles in public places.

HOW DOES IT WORK

The aluminum surface is treated with a silica-based nanoparticle coating with a bioactive agent that upon direct contact with a bacteria, virus or fungus, perforates the cell membrane and quickly kills it.

ADVANTAGES

Triple level active component: antiviral, bacterial and fungal.
- Unlike silver ion based technologies; the antimicrobial activity of Nanocoat® does not lose its power.
- Long lasting activity using a low amount of active substance.
- High surface concentrations of bioactive agent reduce the probability of bacteria resistance.
- Can be applied on powder coatings, liquid coatings and anodization and exposed to light.
- Silica is one of the most common raw materials in the world even used in food and unlike silver (previous anti bacteria treatment) not a heavy metal and as such non-polluting.

AREAS OF APPLICATION

Hospitals, public buildings, schools, apartment buildings projects, geriatric institutions, elderly homes, …

PERFORMED TESTS RESULTS AND INSTITUTIONS

Anodized aluminum pieces with Nanocoat® were tested in an independent laboratory in Germany (Hohenstein Institute) and obtained the highest score in terms of antiviral activity. Wear assays simulating the friction of hands on the surface of the door handle were performed in an external laboratory in Coimbra. The antiviral and antibacterial efficacy of the surface was maintained.