

*sofi*<sup>®</sup>



nanocoat<sup>®</sup>

Anti-viral and anti-bacterial coating



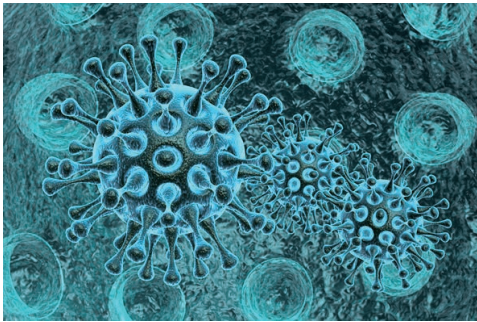
## NANOCOAT® ANTI-MICROBIAL COATING

Nanocoat® is the registered trademark of an antiviral, antibacterial and antifungal surface treatment for anodized and lacquered door and window handles. The treatment process and its product are patented and unique in their kind, because it works on three levels simultaneously: antiviral, bacterial and fungal.

## BETTER SAFE THAN SORRY

The number of people infected with antibiotic-resistant bacteria is increasing every year, and the number of deaths resulting from these infections is also increasing. In Europe, it is estimated that 25,000 people die each year from complications related to this type of infection. Infections can spread in many ways, but the quickest way to spread is through contact with an infected person or a contaminated surface. This is where Nanocoat® comes in.

As part of a joint project by STA, Sobinco and the biogenetic laboratories of the University of Coimbra, we have developed a surface treatment that prevents the spread of bacteria, fungi and viruses through infected surfaces objects in high traffic areas, such as door and window handles in public spaces.



## HOW IT WORKS

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. Nanocoat® was tested with the virus H1N1 and it was very effective, killing the virus in 4 seconds.



## ADVANTAGES

- Triple level active component: antiviral, bacterial and fungal.
- Unlike silver ion based technologies; the antimicrobial activity of Nanocoat® does not lose its power over time.
- 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, etc.



## RESULTS OBTAINED IN TESTS AND INSTITUTIONS

Parts anodized with Nanocoat® were tested in an independent laboratory in Germany (Hohenstein Institute) and obtained the highest score in terms of antiviral activity. Wear tests to simulate hand friction were carried out by an external laboratory in Coimbra and the antiviral and antibacterial efficacy of the surface was maintained.