

# TECHNICAL SHEET FUNCTIONAL COATING FN®3

The most efficient, low-cost and silent air purifier.

A photocatalytic coating specially designed to provide maximum air purification efficiency and protection against microorganism deposits.

The self-cleaning surface creates a functional air purification tool with long-term efficiency.

## **USAGE:**

The FN®3 functional coating is an indoor coating application. It is used as a highly efficient, low cost air purification technology for a wide range of pollutants and odors. It creates a functional layer on the walls and ceiling, which in addition to cleaning the air can as well effectively prevents the build-up of microorganisms. Especially beneficial to those who have different allergies, asthma, etc., which will help to create a healthier and cleaner environment.

The FN® 3 functional coating can provide a healthier environment in areas where people congregate (shopping malls, airport halls, office buildings), as well as in your home, school and retirement home. It is also a new, promising technology for increasing the level of protection of patients and healthcare staff from resistant strains of dangerous bacteria and infections.

Our technology is also used to remove unpleasant odors and clean air of hazardous substances in industrial plants. It can also be used for improved protection against undesirable microorganisms in the food production and preventing diseases in animal husbandry.

#### **PRODUCT DESCRIPTION:**

It is a special coating whose protective functions are based on the use of the physical phenomenon of photocatalysis and other physical properties of the materials contained therein. The functionality of the coating, unlike chemical preparations, is virtually inexhaustible. FN®3 functional coating is an aqueous suspension of patented mineral substances with a high content of photoactive titanium dioxide (TiO2). The high TiO2 content and optimized mineral binder in the coating ensures an extremely effective substrate protection. It is also intended for extreme conditions in health care, industrial production and toxic operations. We deliver it in its basic white form and should not be tinted.

Video – Interior Application of FN®













#### **PROPERTIES:**

- Cleans air from allergens, viruses, bacteria, toxic substances and odors with maximum photocatalytic efficacy (most effective in the world)
- Reduces the risk of transmission of infectious diseases, reduces the risk of asthma
- Highly effective against mold and microorganisms
- Prevents the accumulation of viruses and bacteria
- Ecological solution without chemistry: a purely physical effect

#### **COATING DESCRIPTION:**

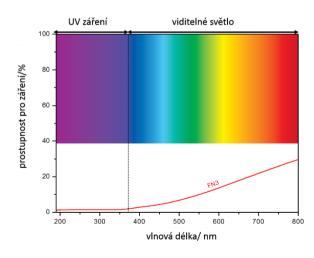
FN® 3 is white and has a relatively high covering power. The coating thickness is optimally 5-20 microns. The created layer is white and relatively soft, therefore we recommend applying the coating to the ceiling and areas where there is no risk of abrasion.

The layer is active immediately after the impact of daylight or artificial light with a proportion of the UVA spectrum. Maximum paint efficiency is 365 nm. The coating is matured after 24 hours.

THE PHOTOCATALYTICAL EFFECT IS PERMANENT, INEXHAUSTIBLE, AND DOES NOT WEAKEN OVER TIME. ALL PROTECTIVE FUNCTIONS ARE PROTECTED WHERE THE PAINT LAYER IS EXISTING.

Dirt, bacteria and other microorganisms do not buildup on the surface treated with the FN® 3 coating activated by UVA light due to photocatalysis. It is a highly efficient air purification technology and reduces the risk of transmission of interior diseases.

The optical properties of the functional coating FN®3 are illustrated by the enclosed graph, where it is clearly detailed how the shielding efficiency increases dramatically as well as the high UV absorption, the energy of which is converted into a self-cleaning effect...













#### **COMPOSITION:**

An aqueous composite suspension of uncoated titanium dioxide and patented inorganic binders. It contains very high concentrations of 100-110 g / l photocatalyst, ensuring its long-term flawless protection function as well as high self-cleaning efficiency.

The coating does not contain any organic compounds in accordance with European and world trends (ISO 16000, ISO 16100). The applied coating layer is completely safe..

#### **RECOMMENDATIONS FOR USE:**

It serves to form an upper mineral active photocatalytic layer providing air purification and microorganism reduction. The layer is white and is suitable for all common types of plaster, brick or plasterboard substrates.

FN® 3 is certified for concrete surfaces.

It is not suitable for application on the surface of terracotta/clay surfaces!

Do not allow the coating to freeze before application!

#### **INTERIOR:**

For masonry and plasterboard substrates – FN® 3 functional coatings are usually applied to the room ceiling for indoor air cleaning.

FN®3 paint should not be colored, so it is only available in white.

Examples of FN®3 lighting for indoor activation:









# METHOD OF APPLICATION:

The optical properties of the FN®3 functional coating enclosed



graph, where it is clearly seen how the shade efficiency increases dramatically and is seen to be highly absorbed by UV radiation, is converted into a self-cleaning effect.

It is therefore important that the coating is still in motion. In practice, this means that only a small amount of the already thoroughly mixed paint is poured and then applied. Shake again before re-pouring.



For a nice look, always apply a thin but consistent even layer that will dry thoroughly before the next coating application.

Stříkáním - optimálně 3x. Na hladké plochy doporučuje výrobce nanesení nátěru stříkáním pro vytvoření tenké rovnoměrné vrstvy.

Spraying - optimally 3x. For smooth surfaces, the manufacturer recommends spraying to form thin, even layers.

Brush application in one to three layers is very suitable for poorly accessible areas, places where are uneven surfaces and for the treatment of areas that may be affected by mold, for example.

- Cover all targeted surfaces well with FN®
- The layer must be allowed to dry between the applications
- Do not apply on wet surfaces
- For better performance, we recommend that you clean the surfaces thoroughly before applying the coating

The technology used must correspond to the specific conditions, condition and requirements of the object on which the coating is to be applied.

The applied layer is frost-resistant and highly vapor-permeable.

#### Thinning:

Do not thin!

#### **Consumption:**

: USUAL CONSUMPTION FOR CREATING A PROTECTIVE SURFACE: 7-10 m2 / l in three coatings (depending on material absorbency, surface roughness and application method)

### **Tool cleaning:**

With water soon after use.



#### **PACKAGING:**

Plastic containers of 1 and 5 liters

Valid for at least 2 years from date of production at 10-25 ° C, in unopened original packaging. Before use, mix thoroughly by shaking in the original container. I tis necessary to mixing the suspension (paint) with a rod blender after thorough mixing in the bottle (canister) for more than 2 days from the date of manufacture.

Observe safety precautions in accordance with the safety data sheet and applicable labor protection regulations. Keep out of the reach of children. Do not eat or smoke while working. Use a respirator or other suitable respiratory equipment when spraying and do not breathe spray mist. Wear protective goggles and hood or other means to protect eyes, face and skin. If contaminated, rinse thoroughly with water and apply cream. In case of irritation seek medical advice.

#### **WASTE DISPOSAL:**

Dispose of the empty packaging at a collection point for packaging waste.

#### Notice:

These figures are based on the current state of knowledge and have been compiled to the best of our knowledge, but in no way may they be considered a legal guarantee of any kind.

#### PANTENT OWNER AND MANUFACTURER:

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#### **DISTRIBUTOR:**

FN-NANO s.r.o.

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