



TECHNICAL SHEET

FN[®]AQUA

Swimming pool water additive to reduce the use of chemicals during maintenance. Gentle on human skin, suitable for allergy sufferers.

Specially developed to prevent the growth of green algae, bacteria and fungi.

It actively destroys toxins, grease and dirt.

Works at every pH.

Ecological solution without chemistry - purely physical effect.

USAGE:

FN[®]AQUA is suitable for home swimming pools with fine sand or zeolite filtration systems or for natural pools. It can be used both for outdoor exposed swimming pools that have direct access of daylight.

FN[®]AQUA can be used concurrently with chemicals or active oxygen (ozone) and gradually reduce their dosage. With suitable pool water composition, lower frequency and intensity of use of the pool and following the recommended procedure of pool water maintenance, the pool can be operated with a minimum of chemical means. It is also possible to maintain the water in garden ponds without chemical products.

According to valid legislation it is not possible to use it for public swimming pools and swimming pools without perfect and regular maintenance.

PRODUCT DESCRIPTION:

It is a special aqueous suspension of inert minerals to reduce the consumption of chemical products in the maintenance of pool water. The substances contained in the suspension, through the use of the physical phenomenon of photocatalysis and other physical effects, effectively prevent the proliferation of undesirable microorganisms in the pool water. It is a proprietary formula with mineral binders and a high content of photoactive titanium dioxide (TiO₂).



**SUPER-STRONG
SELF-CLEANING
EFFECT**



**USES NO
CHEMICALS**



**PREVENTS
GROWTH OF
BACTERIA**



**ANIMALS
& PLANTS
FRIENDLY**



In order to ensure the function of protection against overgrowth of undesirable microorganisms it is necessary to:

- **Ensure access to daylight**
- **apply to the pool water in accordance with the application instructions!**

FN®AQUA reduces the overgrowth of microorganisms using the following mechanisms:

- Coating microorganisms with an inorganic film that prevents ultraviolet radiation and thus stops their physiological processes based on the use of photosynthesis (cyanobacteria and algae).
- Daylight or artificial ultraviolet light-activated microscopic crystals of photoactive titanium dioxide (TiO₂) physically remove molecules and microscopic particles of organic impurities from the water as a source of nutrients for microorganisms
- Thanks to photocatalysis, cell walls of bacteria molecules or spores break down.

PROPERTIES:

- **Provides protection against overgrowth of undesirable microorganisms - preventing the growth of green algae, bacteria and fungi**
- **Actively eliminates grease, dirt and toxins, including those arising from the use of chemical products to maintain pool water**
- **Works at every pH**
- **Reduces the use of pool chemicals - gentle on the human skin, suitable for allergy sufferers, small children and people with sensitive skin**
- **Ecological solution without chemistry - purely physical effect**

APPEARANCE:

FN®AQUA is a white aqueous suspension with a tendency to sediment the mineral components it contains. This sedimentation does not impair the functionality of the preparation.

INGREDIENTS:

Aqueous suspension of untreated titanium dioxide and patented inorganic binders. It contains high concentrations of 80-100 g / l TiO₂ photocatalyst (chemically identical to food color - titanium white, a substance that is massively used in the food industry and cosmetics).

The coating does not contain any organic compounds (ISO 16000-10, ISO 16000-11) in accordance with European and world trends. The suspension is absolutely safe, on a purely inorganic basis.

RECOMMENDATIONS FOR USE:

OUTDOOR SWIMMING POOLS

FN®AQUA is suitable for outdoor outdoor pools with a fine sand or zeolite filtration system. For outdoor swimming pools with a roof, it is important that the roof can be opened or moved so that sunlight can penetrate into it. If we reduce the doses of pool chemistry and even when using FN® Aqua begins to regularly overgrowth microorganisms (water turbidity) it is necessary to increase the doses of pool chemistry. For each pool it is necessary to find, based on experience, the optimal ratio between chemistry and FN® Aqua.

OUTDOOR COVERED SWIMMING POOLS

FN®AQUA is suitable for indoor swimming pools with fine sand or zeolite filtration. When using in covered swimming pools it is necessary to open the roofing during application and to ensure daylight supply for at least 6-8 hours. If we reduce the doses of pool chemistry and even when using FN Aqua begins to regularly overgrowth microorganisms (water turbidity) it is necessary to increase the doses of pool chemistry. For each pool it is necessary to find, based on experience, the optimal ratio between chemistry and FN Aqua.

GARDEN PONDS (& SWIMING PONDS)

FN®AQUA is used just like outdoor pools.

Never cover the pool with a tarpaulin for long periods of time - this will prevent the access of light and the ability of FN®AQUA to photocatalytically clean the pool of microorganisms!

According to valid legislation it is not possible to use it for public swimming pools and swimming pools without perfect and regular maintenance.

Swimming pool in the house Velké Popovice



Private swimming pool in Drhovy





APPLICATION PROCEDURES AND PRINCIPLES:

Always apply with sufficient light!

In the morning or in the morning, the FN[®]AQUA suspension can act quickly and immediately, allowing sufficient time for daylight to be applied after application.

Before each application, the suspension must be shaken very thoroughly in the packaging (min. 30 sec) in which it is supplied!

Perfect shaking is required to achieve uniform mixing of the insoluble TiO₂ nanoparticles in the suspension. This is necessary to ensure the proper functioning of FN[®]AQUA (FNA).

FNA is applied to the pool diluted and freshly blended!

PREPARATION OF AQUA FN AND ITS APPLICATION IN SWIMMING POOL:

1. PREPARATION

a) Preparation of FN[®] AQUA for dilution:

FN Aqua shake perfectly in the original packaging - pour the necessary amount (see consumption and dosing below) to dilute into a larger container, where we can mix. Here it is blended perfectly with a blender on the bottom of the container.

Dilution FN AQUA:

Step 1. To the mixed FN Aqua we add water gradually and evenly until dilution in the ratio of 1 part FNA: 5 parts water. For the whole time of dilution, mix again with a bar blender. Total time 3 min. - occasionally let the blender rest.

Krok 2. Into the container with diluted and mixed FN[®] Aqua gradually add another 7 parts of water and still mix with a bar mixer for about another 3-5 minutes.

COMPLIANCE WITH THE SUSPENSION PREPARATION PROCEDURE IS IMPORTANT TO ACHIEVE THE PERFECT DISTRIBUTION OF MINERAL COMPONENTS IN POOL WATER AND THAT ENSURE THAT THE PRODUCT FUNCTIONS WELL!

2. APPLICATION OF DILUTED FN AQUA IN SWIMMING POOL

a) For the first application or when the water becomes cloudy during the season:

Turn off filtering. Spray the perfectly mixed and diluted FN Aqua suspension evenly with a garden sprayer (a small pressure sprayer in small pools is sufficient) to the water level in the pool and allow it to disperse approximately 6-8 hours to ensure perfect microorganisms are enveloped in the entire pool. Then switch on the filtration and let it run until the total volume of pool water is filtered three times. I.e. depends on filtration performance.

In normal operation (after first application):

Turn off filtering. Spray the perfectly mixed and diluted FN Aqua suspension evenly with a garden sprayer or use a "countercurrent" for mixing. After dispersing the suspension in the pool water (manifested by its uniform milky turbidity), allow direct daylight for 6-8 hours in order to perfectly coat the microorganisms in the volume of the whole pool.



Then switch on the filtration and let it run until the total volume of pool water is filtered three times. I.e. depends on filtration performance.

Note: After application, there is always a slight whitening of the water, which is gradually lost thanks to sand filtration and the water remains crystal clear.

The water is alive after FN AQUA treatment, it does not contain toxic chemicals (chlorine) FN® AQUA suspension physically (without chemistry) only affects microorganisms, so that a diver may appear in the pool.

It is friendly to animals and plants - its use is also in aquaristics.

The mineral substances contained in the FN Aqua suspension are gradually bound in the sand of filtration and their concentration in the pool water gradually decreases without leaving any harmful residue in the water. When using FN Aqua for a long time, the walls of the pools may become whitened and only appear after the pool has been drained. Bleaching is not a problem. On the contrary, it forms a layer on the surface of the pool wall, which increases the effectiveness of protection against overgrowth of microorganisms.

3. ENSURING LIGHT ENERGY

FN Aqua purifies water and regulates the multiplication of microorganisms in it on a physical basis (without the use of toxic chemicals). To ensure this function, it is essential that the pool water penetrates as much as possible of the ultraviolet component of daylight.

Notice:

Glass and plastics used for transparent pool roofing do not let in a sufficient amount of ultraviolet radiation. To ensure the FNA's cleaning function, it is advisable to move or open the enclosure in such a way that daylight can reach the water level.

Consumption and dosage (dilution):

FN®AQUA (FNA) is available as a concentrated suspension.

For continuous maintenance in order to reduce the amount of chemicals used for pool water maintenance, 0.1 l of FNA concentrate per 20 m³ of pool water is used.

I.e. 0.005 liter of FNA concentrate per 1m³ of pool water.

Application of FNA is carried out in the prescribed amount usually in the interval of 7 - 14 days, depending on the condition of the water in the pool.

In the case of greater activity in the pool or turbidity of the pool water, it is preferable to apply immediately.

Cleaning tools:

Water - as soon as possible after use.

PACKAGING:

Plastic containers 0,25; 0.5; 1 and 5 liters.



STORAGE:

3 years from date of manufacture at 10-25 ° C, in unopened original packaging. Before use, mix thoroughly by shaking in the original container. After thorough mixing in a bottle (canister), mix the suspension with a bar mixer.

Must not freeze!

SECURITY PRECAUTIONS:

Observe the safety precautions in accordance with the safety data sheet and applicable labor protection regulations. Keep out of reach of children.

WASTE DISPOSAL:

Return the used empty packaging to a collection point for packaging waste. Follow the rules outlined in the safety data sheet and local regulations.

Notice:

The information given is based on the present state of knowledge and experience and has been compiled to the best of our knowledge, but in no case can it be construed as a legal guarantee of any kind.

OWNER OF PATENT AND MANUFACTURER:

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CZECH INVENTION-PROTECTED BY PATENT AND FN® TRADEMARK

VERIFIED MORE THAN TEN YEARS OF PRACTICAL EXPERIENCE