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## The Product – alternative thinking

- The product AquaFinesseTM Pool Puck® is a human and environmental friendly additive, that is not a biocide and therefore has no microbial oxidising effect.
- AquaFinesseTM is a unique and patented water treatment, as it changes and destroys the habitat of the bacteria
- Microbial biofilms on surfaces cost the nation billions of pounds annually in equipment damage, product contamination, energy losses and medical infections
- Did you know: a fully developed biofilm on ships can increase the energy costs by 20 %.

Source: Dewi Bakker, investigation of section Bioadhesie of BioMedical Engineering The Netherlands.



# AquaFinesse<sup>TM</sup> Pool Puck

AquaFinesse<sup>TM</sup> Pool Puck is supplied in tablet form:

- 1. Tablets for 20.000 Liter water treatment per week (small pools)
- 2. Tablets for 60.000 Liter water treatment per week (professional pools)

The AquaFinesse<sup>TM</sup> Pool Puck can be added to the water in the buffer tank Did you know:

• By removing biofilm, the AF Floor Puck, (for treatment of slippery floors i.e. swimming pool surrounds) offers outstanding and consistent results! Test carried out in 4 pool areas show a reduction in the slipperiness of 88%

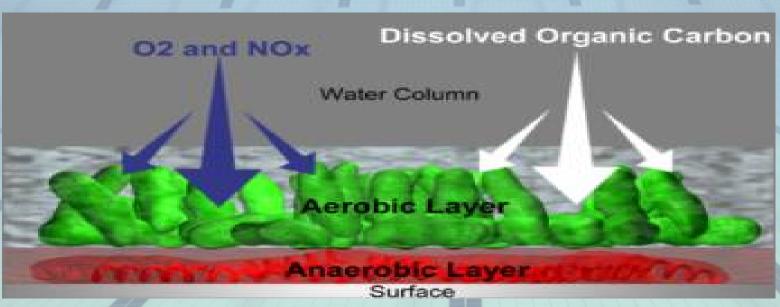
Did you also know that 60% of all accidents in pools happen due to slippery floors!



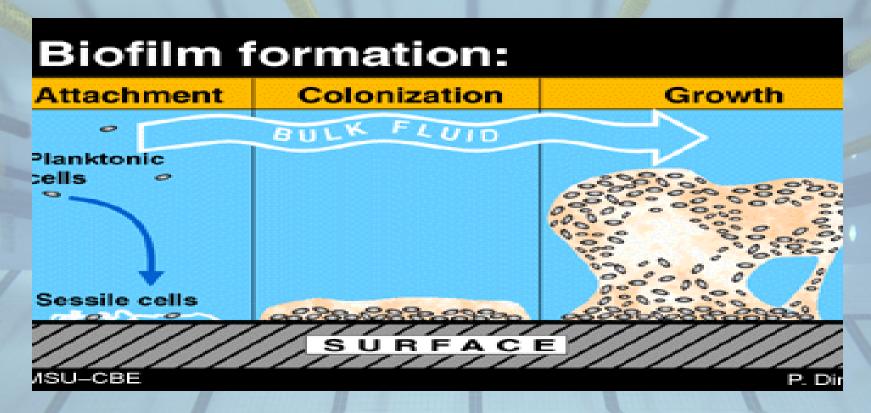
## **Technology**

The patented AquaFinesse<sup>TM</sup> technology is also used in industry and medical applications.

Tests prove that AquaFinesse<sup>TM</sup> penetrates and removes biofilm, also called xPS (extra cellular Polymeric Substance). Allowing chlorine or other biocides work much more effectively







#### Formation of biofilm on the surface

Sessile cells form mushroom like slimy habitats with small water channels known as biofilm. This act as a protection shield against biocides. Nutrients (food) is gathered by the sticky, slimy layer, whilst inside sheltered from harm the bacteria can grow and colonise. A biofilm is essentially itself an entire eco system were bacteria thrive.



#### Where biofilms can be found

- 1. On solid substratums in contact with moisture
- 2. On soft tissue surfaces in living organisms
- 3. At liquid-air interfaces

With only small amounts of resources for growth, biofilm can grow quickly and become macroscopic.

# **Problems in swimming pools**

Following problems can occur as a result of attached biofilm:

- Costs of equipment and replacement of components
- Risk of re-growth of bacteria
- Slimy walls, polluted seams, (tile pools)
- Increase of corrosion
- Extra maintenance costs due to replacement of tiles and grouting damaged caused by harsh biocides, corrosion of equipment, continual water line cleaning etc

Increased risk to health

Health risks can be hugely reduced by AquaFinesse<sup>TM</sup> by the removal of biofilm and avoidance of fresh bacterial attachments.

#### AquaFinesse<sup>TM</sup> how it works

AquaFinesse<sup>TM</sup> is a patented product, developed to:

- Mitigate the biofilm, loosens it from it's substrate and coagulates
- AquaFinesse<sup>TM</sup> ensures reduction of bacteria by the removal of biofilm (dramatic decrease of re-growth and clean surfaces) up to 70%
- AquaFinesse<sup>TM</sup> leaves a protective layer on surfaces to guard against corrosion, and attachment of colonists
- AquaFinesse<sup>TM</sup> 'removes old and new biofilm for effective treatment with biocides in the waterphase
- AquaFinesse<sup>TM</sup> breaks down (calcium) scaling
- AquaFinesse<sup>TM</sup> prevents the breeding ground of bacteria and legionella, making the chance of infections by human patogens negligible



#### AquaFinesse<sup>TM</sup> with chlorine?

Chlorine is recognised to be one of the best sanitisers known to man. But there are alternatives which can be used successfully according to preference:

- Membrane filtration physical removal of nutrient of bacteria
- UV-C desinfection
- Ozone
- Peroxide based products

All products are based on killing bacteria (biocides) in the water phase.

AquaFinesse<sup>TM</sup> removes biofilm from your system and inhibits regrowth, without the possibility of colonisation there are far fewer bacteria to kill allowing all of the above treatments in combination with AquaFinesse to work externely effectivley.



## AquaFinesse<sup>TM</sup> tests and results

- Test Labo Derva 70 % less re-growth of bacteria
- KEMA institute: heavy test: 10 x more polluted pool water than normal
- AquaBasic B.V. test for the working of Floor Puck against slippery floors in pools, restaurants etc. Result: 88 % better
- Fisth test: USA, Environmental Protection Agency 16 x the described dosage – excellent results for the environment
- Montana State University USA center for biofilm test for the working of AquaFinesseTM to mitigate biofilm – Good results

\* Tests can be downloaded from www.aquafinesseindustry.com







Presentation display for showroom purposes.
(Pool Puck for private pools)



AquaFinesse<sup>TM</sup> Pool Puck for professional pools 30,100,250 pieces



# AquaFinesse<sup>TM</sup> Industry

AquaFinesseTM hot tubs
AquaFinesseTM pools
AquaFinesseTM industry/medical,

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