

# BIOLOGICAL **DISINFECTION** OF **IRRIGATION** WATER FOR GREEN **COURSES** & **AGRICULTURAL** CROP **HEALTH**

- A SAFE NON-RESIDUAL MICROBIOCIDE, VIRUCIDE, FUNGICIDE & SPOROCIDE FOR ALL GRASS COURSES & ALL MAINTENANCE TECHNOLOGY.
- RELIABLE NATURAL ELIMINATION & PROTECTION AGAINST AGRICULTURAL OUTBREAKS WITH NO PRECAUTIONS OR IMPACT ON CROPS.
- PREMIUM RESULTS WITH RECYCLED STP WATER, MAKING IT IDEAL FOR HUMAN CONTACT & PUBLIC PARKS.
- DESIGNED FOR LAWN IRRIGATION & IMPROVING THE LONGTERM HEALTH OF GRASS & TURF.
- IDEAL FOR HIGH WEAR SPORTS COURSES & INHALATION SAFETY WITH NO HALTS IN COURSE USAGE. AMONG TRAVELERS.



**ANOSAN**<sup>®</sup> **ROYAL GREEN** *480-570 OXI*  
NATURAL DISINFECTION

# A HIGHGRADE BIOLOGICAL SOLUTION WITH NO TOXINS OR RESIDUES FOR LANDSCAPE QUALITY & HARVEST OPTIMIZATION

**ANOSAN ROYAL GREEN®** powerfully removes bacteria, viruses, fungi, spores and algae through biological disinfection of irrigation water – making it ideal for golf courses, football fields, and sports venues with turf without halting course use.

Water is a limited resource, **ANOSAN ROYAL GREEN®** helps in disinfection of recycled water to eliminate the usual contaminants of microbes. Without this disinfection common complaints would include unwanted odors, poor root growth, algae contamination, and spread of “black layers”.

It's specifically designed for lawn irrigation and approved according to DIN EN 901, improving the longterm health of grass and turf. Otherwise, the permanent coating of septic water disturbs the turf biology and favors anaerobic conditions that are promoted by the low proportion of topsoil, fertilization, and constant moisture.



**ANOSAN ROYAL GREEN®**  
*offers premium protection  
for green landscapes and  
all those in contact  
including babies, children &  
the elderly who are often  
at most risk of the infected  
water or irritation from  
chlorine dosage in  
irrigation systems.*

Using **ANOSAN ROYAL GREEN®** in irrigation also prevents the accumulation of biofilm in irrigation systems keeping pipe maintenance low, and removing contaminants in irrigation water increasing the health of crops.

In addition, human pathogens that are spread and inhaled during sprinkling and grass course irrigation can compromise the health of golfers and athletes, inhaling unwanted spores leading to allergies and illness.

**ANOSAN ROYAL GREEN®** is a practical solution for the overall hygiene requirements of a golf course facility needs as well as agricultural crop health, acting against free-floating bacteria and biofilm irrigation bars, hose lines, etc.

**ANOSAN ROYAL GREEN®** is internationally recognized in horticulture against agricultural outbreaks, with no precautions or residues on crops, and is additionally aligned with universal criteria in organic farming.

<ul style="list-style-type: none"> <li>Kills 99.995% of bacteria, viruses, fungi and spores</li> <li>Non-toxic disinfectant &amp; deodorizer</li> <li>Free of alcohol, aldehydes, dyes &amp; scents, non-staining</li> <li>Hypoallergenic &amp; non-irritant</li> <li>pH neutral</li> <li>Cost &amp; time effective with immediate disinfection</li> </ul>	In accordance to: <b>EN 1276</b> <b>EN 13697</b> <b>EN 14476</b>
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## ANOSAN ROYAL GREEN®

REDEFINING SAFETY, EFFICACY & EASE OF USE IN GRASS COURSES & AGRICULTURAL DISINFECTION SOLUTIONS

DISINFECTION	ANOSAN ROYAL GREEN®	CHLORINE	OXIDIZING AGENTS / HYDROGEN PEROXIDE	QACS / BENZYL AMMONIUM CHLORIDE
MICROBIOLOGY	Bactericidal ++ Virucidal ++ Fungicidal ++ Sporicidal ++  No promotion of resistance	Bactericidal Virucidal (+/-) Fungicidal Sporicidal (+/-)	Bactericidal Virucidal Fungicidal (+/-) Sporicidal(+/-)	Bactericidal Virucidal Fungicidal Algaecidal
PRECAUTIONS	No precautions required	PPE required	Personal protection equipment required	Precautions Required
TOXICITY	Non Toxic Safe to Ingest	Toxicity Skin irritation category 2, Acute inhalation toxicity 3,	Category III or IV	Toxic, causes irreversible eye and skin damage
ADVANTAGES/ DISADVANTAGES	No Disadvantage, Eliminates Antibiotic Residues, Eliminates Biofilm Non corrosive Safe to ingest	Reactive chemical. Corrosive in the presence of moisture. Terrestrial toxicity: Very ecotoxic in the soil environment.	Rinsing is required where direct skin or oral contact can occur, as it cause skin and eye irritation.  Requires prevention of spreading in sewers.	This pesticide is toxic to fish, and is harmful to fish bearing waters in landscapes.  Can contaminate waters by residues or through cleaning of equipment or disposal of wastes. Harmful to birds, and should not be applied to turf areas actively grazed by waterfowl.  Should not be discharged into lakes, streams, ponds & estuaries, oceans or other waters

++ = very good efficacy, + = effective, (+) = gaps in effectiveness, - = not effective

**ANOSAN ROYAL GREEN®** combines easy aesthetic maintenance at green properties with deodorization, while being free of chemicals, toxins, or environmental harm.



#### AREAS OF APPLICATION FOR **ANOSAN ROYAL GREEN®**

- Parks
- Resorts & Landscaping
- Golf Courses & Other Sports Courses
- Algae Affected Shrubbery
- Home Lawns & Gardens
- Promoting Plant Growth & Yield Increase in Crops

**ANOSAN ROYAL GREEN®** is safe for bees, and a rare solution which eliminates and prevents bacterial, viral or fungal infection with no harm towards multicellular biodiversity around treated crops or landscapes.



## APPLICATION & DILUTION

- A concentration ranging from 1: 500 to 1: 1000 is injected directly into the irrigation line.

With a strong infection such as algae, approach through focused treatment in concentrations of 1: 50 (or more) and apply where necessary.

For heavily affected grass with algae, manual removal of the algae build up should be performed, such as scraping off the crust, and then treating the grass as the following:

**Heavy infestation\*:** 100 ml ANOSAN ROYAL GREEN® in 2 liters of water/m<sup>2</sup>.  
Repeat every 14 days.

**Medium infestation:** 50–80 ml ANOSAN ROYAL GREEN® in 2 Liter water/m<sup>2</sup>.  
Repeat as necessary after 14 days.

**Low infestation:** 50 ml ANOSAN® in 2 liters of water/m<sup>2</sup>.

*\*heavy infestation occurs when more than 30–40% of the area is infested or if the algae layer > 1mm thick.*





*Avoid infected plot removals and tend to your golf property with **ANOSAN ROYAL GREEN®**. Perfect for fostering the healthiest grass with minimal application and no halts in course use. Also deodorizes to provide a pleasant environment for course users and eliminating odors associated with wet grass.*

- **ANOSAN Royal Green®** must not be mixed with other products (eg fertilizer) and only used in irrigation.
- 3–4 days prior to use no fertilizer, no wetting agent and no pesticides should be applied.
- Large nozzles should be used to minimize particle drift.
- There must be sufficient soil moisture to avoid the immediate absorption of the treatment.
- Avoid treating during heavy rain or the hottest time of the day, as the treatment could either be washed away or evaporate minimizing efficacy.



**ANOSAN ROYAL GREEN®**  
*disinfects crops with no residues or changes to water parameters, offering an easy solution against outbreaks and loss of harvest. No masks or special precautions needed, while also being safe to ingest & hypoallergenic.*

- **ANOSAN ROYAL GREEN®** is biological and completely safe. No special protective equipment when handling is required or rinsing off.
- No precautions are needed with animals or birds that may drink from the treated irrigation water safely with no harm.
- **ANOSAN ROYAL GREEN®** has a residual effect if it penetrates the soil. This permits surface algae to be suppressed, especially if the soil has been loosening manually when scraping off the algae layer.



*ANOSAN ROYAL GREEN® is essential to maintaining quality grass sports courses without halts of course use, and is perfect for high wear courses with no exposure effects towards course users.*

- Instant reseedling and planting seals the previous algae infected areas.
- Upon treating with **ANOSAN ROYAL GREEN®**, noticeable algae layers and spots recede as the grass recovers. Any foul odor of the backing layer is little by little replaced by an original earthy smell as the grass roots and greens normalize.



*ANOSAN ROYAL GREEN® works in all pipes and irrigation systems, with the added benefits of protecting all pipes and technology from biofilm accumulation, algae growth, and general microbiologically influenced corrosion (MIC).*

## RECOMMENDED EQUIPMENTS



Dosing Systems



Pressure Sprayer

Fogger - Cold Nebulizer



## AVAILABLE VOLUMES FOR ANOSAN ECO®

480-570 OXI Concentrated solution:

- 5 Litre
- 20 Litre
- 200 Litre
- 1000 Litre



## COMPOSITION

water > 99 %, activated electrochemically by ECALIT process  
sodium chloride < 1%, sodium hypochlorite < 0.1%.

## HANDLING & STORAGE

Store at room temperature in a cool, dry place.  
Protect from direct sunlight.  
Opened package should be used within 3 months of opening date.



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