



Photocatalytic nano-coating for artificial turf fields to prevent algae and the build-up of micro-organisms.
Innovative protection for sports and playing fields

Nano-EcoLine PlayFieldShield is a water-based, photocatalytic coating based on an innovative, safe formula, specifically developed to provide long-lasting protection for artificial turf fields against contamination, microorganisms, and wear and tear, while maintaining playing quality and safety. After activation by UV light, a self-cleaning effect develops, actively protecting the surface for 6 to 8 months. The product is biologically inert, odorless, environmentally friendly, and safe to use.

Key Benefits

- Active photocatalytic effect: prevents the build-up of a breeding ground for bacteria under the influence of UV/sunlight organic pollution, bacteria, algae and fungi, preventing them from developing.
- Long-term hygiene: reduces odor formation and risk of infections by microorganisms.
- Safer playing surface: prevents slipperiness due to biofilm build-up and algae growth.
- Less maintenance: extends the life of artificial grass and reduces the need for cleaning rounds and cleaning agents.
- Environmentally friendly: water-based coating, solvent-free and not classified as a hazardous product.
- Easy application: suitable for existing and new artificial turf fields, with standard spraying equipment.

Areas of application

- Football fields, hockey fields, paddle and tennis courts and athletics tracks
- Schoolyards, playgrounds and recreation areas with rubber tiles
- Artificial grass in public or private sports facilities

Technical specifications

Characteristic	Value / Description
Physical condition	Liquid, milky suspension
Colour	White (after shaking before use)
Smell	Odorless
pH value	± 2.1
Density (20 °C)	1.07 g/cm ³
Solubility	Miscible with water
Flash point / Flammability	Not flammable
Active ingredients	10–20% TiO ₂ (anatase), 0.01–0.1% AgCl
Stability	Stable when stored < 60 °C, away from direct sunlight.
Packaging	Concentrates in jerrycans or drums (professional use)
Shelf life	In closed packaging for at least 12 months

Use and dosage

Dilution: Mix

1 part Nano-EcoLine PlayFieldShield concentrate with 100 parts water (1:100).

Stir or shake well for a homogeneous solution!

Consumption (average) 20 m² per litre of prepared/ready-to-use coating:

- Padel court (± 200 m²): • 10 liter mixture (0.1 liter concentrate)
- Hockey field (± 5,000 m²): • 250 liters mixture (2.5 liters concentrate)
- Football field (± 7,100 m²): • 360 liter mixture (3.6 liter concentrate)

Application: Apply the diluted product evenly with a spray boom or atomizer onto clean, dry artificial grass.

Avoid puddle formation. The application is playable again after 24 hours of drying and fully activated after 48 hours of exposure to UV light.

Frequency: Repeat treatment after approximately 6 to 8 months or after intensive cleaning.



Nano-EcoLine PlayFieldShield

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Safety and environment

- Not intended for use on humans or animals.
- Keep out of reach of children (P102).
- Dispose of residues and packaging in accordance with local regulations (P501).
- Prevent discharge of large quantities into surface water.
- No classified hazards according to CLP regulation (EC 1272/2008).
- Contains no hormone disrupting or persistent organic substances.
- For professional use only.

Storage and shelf life

Store in original packaging, tightly closed.

Storage temperature: 5–35 °C.

Protect from direct sunlight and frost.

Shelf life: at least 12 months from production date.

Active technology

The Nano-EcoLine PlayFieldShield works on the basis of photocatalysis. As soon as the coating is exposed to light/UV radiation creates reactive oxygen radicals that oxidize and thus eliminate the breeding ground for organic contamination, bacteria, and odors. This prevents algae, bacteria, and microorganisms from growing, keeping the treated surface clean for a long time.

Result

- Hygienic and fresh playing field
- Fewer slipping and odor problems
- Lower maintenance costs
- Sustainable extension of field life