

2127 | Biosativa® Drone Clean Concentrate

Bio Cleaner for Automated Drone Cleaning Systems

The increasing use of professional drone cleaning systems is changing the way buildings, infrastructure and industrial assets are maintained. Modern cleaning drones enable safe, efficient and cost-effective cleaning of surfaces that are difficult or dangerous to access using conventional methods. To fully exploit these advantages, the cleaning agent must meet requirements that go far beyond conventional detergents.

BIOSATIVA® Drone Clean Concentrate has not been developed exclusively for drones; however, its unique combination of cleaning performance, material compatibility, environmental sustainability and economical use makes it the ideal solution for professional drone cleaning systems.

The highly concentrated cleaner is a plant-based biopolymer formulation developed to combine excellent cleaning performance with outstanding environmental compatibility. It effectively removes atmospheric dirt, traffic film, pollen, insects, bird droppings, soot, organic contamination and light oil residues while remaining gentle on a wide variety of sensitive construction materials.

Unlike many conventional industrial cleaners, **BIOSATIVA® Drone Clean Concentrate** is **PFAS-free, solvent-free, readily biodegradable and non-corrosive** when used as recommended. Its low-foaming formulation ensures reliable operation in automatic dosing units, spray systems and drone-mounted cleaning equipment while reducing maintenance requirements and avoiding excessive foam formation during operation.

The high concentrate allows dilution ratios of up to 1:100, significantly reducing transport costs, packaging waste, storage requirements and overall operating costs. This makes BIOSATIVA® an economically attractive solution for large-scale commercial cleaning operations.

Developed and manufactured in Germany under strict quality standards, **BIOSATIVA® Drone Clean Concentrate** combines professional cleaning performance with responsible chemistry, making it an excellent choice for manufacturers of drone cleaning systems, facility management companies, industrial cleaning contractors and OEM partners worldwide.

TYPICAL APPLICATIONS

BIOSATIVA® Drone Clean Concentrate is suitable for routine and intensive exterior cleaning of:

Building Cleaning

- Glass façades
- Curtain wall systems
- Windows
- Aluminium façades
- ACP panels
- Metal cladding
- Stone façades
- Building entrances

Roof Cleaning

- Metal roofs
- Coated roofs
- Industrial roofing systems

Solar & Renewable Energy

- Solar panels
- Photovoltaic systems
- Solar farms
- Glass canopies

Industrial Facilities

- Industrial buildings
- Warehouses
- Production facilities
- Logistics centres
- Storage tanks
- Silos
- Metal structures

Infrastructure

- Bridges
- Noise barriers
- Public buildings
- Stadiums
- Airports
- Railway infrastructure

WHY BIOSATIVA® FOR DRONE CLEANING?

Professional drone cleaning requires more than excellent cleaning performance. Cleaning chemicals must also be compatible with automated spraying systems, sensitive construction materials and increasingly stringent environmental regulations.

BIOSATIVA® Drone Clean Concentrate has been formulated to meet these requirements by combining:

- Excellent cleaning performance
- Very low foaming characteristics
- Outstanding material compatibility
- High dilution capability (up to 1:100)
- PFAS-free formulation
- Solvent-free chemistry
- Readily biodegradable ingredients
- Reliable performance in automated dosing and spraying systems
- Safe handling for professional users
- Excellent economic efficiency for large-scale cleaning operations

Unlike aggressive alkaline or solvent-based cleaners, BIOSATIVA® cleans effectively while helping preserve the appearance and integrity of treated surfaces.

TYPICAL USERS

BIOSATIVA® Drone Clean Concentrate has been developed for professional B2B applications including:

- Manufacturers of drone cleaning systems
- OEM equipment manufacturers
- Professional building cleaning companies
- Facility management providers
- Industrial maintenance contractors
- Solar panel cleaning specialists
- Infrastructure maintenance companies
- Public service contractors
- International distributors
- Private label partners

PRODUCT FEATURES

BIOSATIVA® Drone Clean Concentrate has been developed for demanding commercial cleaning applications where cleaning performance, operational reliability, material compatibility and environmental responsibility are equally important. The carefully balanced formulation combines high cleaning efficiency with low environmental impact and has been designed for reliable use in manual, semi-automatic and fully automated cleaning systems, including professional drone cleaning equipment.

KEY FEATURES

- Highly concentrated formulation for economical operation
- Dilution ratios up to **1:100**, depending on the application
- Excellent cleaning performance against typical atmospheric contamination
- Very low foaming for automatic dosing and spray systems
- Outstanding material compatibility
- PFAS-free formulation
- Solvent-free
- Readily biodegradable
- Based on renewable plant-derived HEBRA® technology
- Pleasant odour
- Suitable for routine and intensive cleaning
- Non-flammable
- No dangerous goods classification for transport
- Made in Germany

SUITABLE SURFACES

BIOSATIVA® Drone Clean Concentrate has been developed for cleaning a wide variety of exterior building materials commonly encountered in commercial, industrial and infrastructure applications. Suitable surfaces include:

Glass

- Float glass
- Tempered safety glass (ESG)
- Laminated safety glass (VSG)
- Insulating glass units
- Low-E coated glass
- Solar glass
- Glass façades, windows
- Skylights

Metals

- Aluminium
- Powder-coated aluminium
- Anodised aluminium
- Stainless steel
- Galvanised steel
- Painted steel
- Architectural metal façades

Composite Materials

- Aluminium composite panels (ACP)
- Fibre cement panels
- High-pressure laminate panels
- Exterior cladding systems

Stone & Mineral Surfaces

- Granite
- Natural stone
- Artificial stone
- Concrete
- Architectural concrete
- Brick, Masonry

Roof Materials

- Metal roofing
- Coated roofing panels
- Industrial roofing systems

Plastics

- Acrylic (PMMA)
- Polycarbonate
- PVC
- GRP / Fibreglass
- Various weather-resistant engineering plastics

Compatibility with other materials should be verified by testing on a small inconspicuous area before large-scale application.

REMOVES EFFECTIVELY

BIOSATIVA® Drone Clean Concentrate has been formulated to remove the typical contaminants found on exterior commercial and industrial surfaces.

Atmospheric Contamination

- Traffic film
- Dust
- Airborne dirt
- Soot
- Industrial emissions
- Carbon deposits
- Diesel residues

Organic Contamination

- Bird droppings & insects
- Pollen
- Tree sap (fresh)
- Organic residues
- Algae deposits
- Light biofilm

Greasy Contamination

- Light oils
- Light grease
- Environmental residues

NOT INTENDED

BIOSATIVA® Drone Clean Concentrate is not intended for the removal of:

- Cement residues
- Concrete splashes
- Mortar residues
- Heavy limescale deposits
- Rust
- Oxidation stains
- Heavy mineral contamination
- Paint residues
- Permanent coatings
- Silicone residues

Specialised cleaners should be used where these contaminants are present.

PRODUCT SPECIFICATIONS

Property	Specification
Product type	Professional concentrated exterior cleaner
Appearance	Clear liquid
Colour	Yellow
Odour	Mild
Technology	Biopolymer Technology
pH value	Mild alkaline
PFAS	Free
Solvents	None
Biodegradability	Readily biodegradable
Foaming	Very low
Recommended dilution	Up to 1:100
Application temperature	+5 °C to +40 °C
Storage temperature	+5 °C to +35 °C
Shelf life	24 months (original unopened container)
Water hardness	Suitable for soft to hard water
Transport	No dangerous goods
Country of origin	Germany

APPLICATION

BIOSATIVA® Drone Clean Concentrate can be applied using manual, semi-automatic or fully automated cleaning equipment.

Suitable application methods include:

- Professional drone cleaning systems
- Low-pressure spray systems
- High-pressure spray systems
- Automatic dosing systems
- Pump sprayers
- Telescopic cleaning systems
- Soft washing equipment

The product should always be diluted according to the degree of contamination.

Application	Recommended Dilution
Light maintenance cleaning	1:80 – 1:100
Routine façade cleaning	1:50 – 1:80
Solar panels	1:60 – 1:80
Industrial contamination	1:20 – 1:50
Heavy contamination	Up to 1:10

Apply evenly to the surface, allow a short contact time if necessary and rinse thoroughly with clean water. Avoid allowing the product to dry on hot surfaces or in direct sunlight.

Notes

- Always test compatibility on an inconspicuous area before first use.
- Do not mix with other cleaning chemicals.
- Follow the recommendations of the equipment manufacturer.
- Store frost-free in the original container.
- Close the container immediately after use.

SUSTAINABILITY

Sustainability is becoming an increasingly important criterion in professional cleaning. **BIOSATIVA® Drone Clean Concentrate** has been developed to combine high cleaning performance with responsible chemistry and efficient resource utilisation.

The concentrated formulation significantly reduces transport volume, packaging waste and storage requirements compared to ready-to-use products. High dilution ratios also reduce chemical consumption per square metre cleaned, contributing to lower operating costs and a reduced environmental footprint.

The formulation contains no intentionally added PFAS or organic solvents and is based on renewable plant-derived technology.

Sustainability Highlights

- PFAS-free formulation
- Solvent-free
- Readily biodegradable
- Based on renewable plant-derived raw materials
- High concentrate for reduced transport emissions
- Reduced packaging waste
- Lower chemical consumption through high dilution
- Manufactured in Germany under strict quality standards

INDEPENDENT TESTING

BIOSATIVA® Drone Clean Concentrate has been evaluated in recognised independent laboratory tests to demonstrate its environmental compatibility and material suitability.

Material Compatibility

Material compatibility has been evaluated in accordance with **ASTM F483**, demonstrating suitability for use on a wide range of engineering materials typically encountered in commercial and industrial applications.

OECD 301 B – Ready Biodegradability

Independent testing according to **OECD Guideline 301 B** confirms that BIOSATIVA® Drone Clean Concentrate is **readily biodegradable**.

The product achieved biodegradation values exceeding the internationally required pass level and reached complete biodegradation during the test period.

OECD 202 – Aquatic Toxicity

Testing according to **OECD Guideline 202** showed **no acute toxic effects on Daphnia magna** under the specified test conditions.

OECD 201 – Algae Growth

Testing according to **OECD Guideline 201** demonstrated good environmental compatibility with freshwater algae under the defined laboratory conditions.

PACKAGING

BIOSATIVA® Drone Clean Concentrate is available in 10 L canisters.

OEM packaging and private label solutions are available upon request.

SAFETY & TRANSPORT

When used as directed, **BIOSATIVA® Drone Clean Concentrate** is safe and easy to handle in professional applications.

- No dangerous goods classification for road, sea or air transport
- Suitable for commercial and industrial use
- Safety Data Sheet (SDS) available
- Technical Data Sheet (TDS) available
- Product information and application recommendations available upon request

Always follow the instructions provided in the Safety Data Sheet and observe local regulations regarding storage, handling and disposal.

QUALITY & MANUFACTURING

BIOSATIVA® Drone Clean Concentrate is manufactured in Germany under controlled production conditions to ensure consistent product quality and performance.

Each production batch is subject to internal quality control procedures before release.