





Product Overview

Currently **AFC Cleaning** has two divisions in the Water Rehabilitation and Treatment Space.

Our products are organic certified, patented, plant extract product developed for the remediation of water and effluent. They are designed with an innovative "green technology" that includes carefully selected green plant materials, extracts, beneficial water soluble herbal oils, aquifer spring water and essential macro minerals.

Our product is eco-friendly and firstly keeps both environmental and human safety in mind. We use sustainably grown ingredients, produced in ways that we do not deplete the ecosystem. They are also grown without toxic pesticides or herbicides and the break down is done through natural decomposition, which is less taxing on the environment.

Our products contain 100% natural ingredients that is safe for aquatic life and the environment. We strive for biodegradable packaging options wherever possible and are continuously improving our packaging to stay on par with the recyclable and biodegradable options and importantly our manufacturing procedures maintain a low Carbon Footprint.

All products are manufactured, packaged and distributed under the consent of the IP holders' Global patent rights.

Below is the high-level overview of the products by division their applications and benefits.

Makro Organics

Makro Organics not only focuses on water remediation in rivers, pond, dams and lakes By breaking down anaerobic, decaying material in the substrate of water bodies and reduce ammonia peaks, bad odours and restores the ecology to a balanced state, but also has a strong presence in the agriculture, sports and turf and mining and industry. Our product has the ability to treat soil and improve conditions by releasing low levels of dissolved oxygen in the soil profile. Increased Oxygen and a greater absorption area results in a greater root mass and ultimately a healthier plant, more resilient against stress and disease. The greater root mass also reduces irrigation needs.



The applications in industry are also expanding rapidly as the product is found to solve several issues currently experienced. Our product provides a solution for pipe and irrigation systems, cleaning and flushing pipelines and canals as well as unblocking nozzles and filters due to organic build-up and pipes with scale and calcification.

Below are the current Makro Organics Products as well as some of the applications and benefits.

OxyTurf™

OxyTurf provides a solution to anaerobic soil conditions and the symptoms thereof by releasing low levels of dissolved oxygen as part of a biological process. It reduces organics, de-compacts the soil profile and at the same time offers a firm playing surface. OxyTurf is applied to combat black layer, anaerobic conditions, slow root development, disease-infected turf, thatch and generally to assist with aeration or replace mechanical aeration if and where it is not possible.

OxyTurf offers you a de-compacted soil profile and a firm playing surface that the players give excellent feedback on.

Increased Oxygen and a greater absorption area results in a greater root mass and ultimately a healthier turf grass, more resilient against stress and disease.

Thatch will decompose and start reducing after 3 months of application.

OxyTurf can also be applied monthly as part of your spray program.

OxyTurf™ provides a solution to:

- Black Layer
- Percolation, Compaction
- Course Manicuring
- Root Mass Increase

OxyTurf™ is designed for:

Sports & Turf

OxvCure™

OxyCure is applied to lakes & ponds, effluent streams and process water systems to reduce Eutrophication that results in unnatural algae blooms and rapid aquatic plant expansion. OxyCure reduces filter clogging and accumulation in pipes & systems.

OxyCure can be applied to:

- Murky water
- Bad odours
- Eutrophication



- Cyanobacteria
- Anaerobic Conditions
- Sludge accumulation
- Effluent Outflow
- High COD, TSS, Ammonia, Sodium, Nitrate/Nitrite
- Low DO (Dissolved Oxygen)
- Polluted conditions

OxyCure™ provides a solution to:

- Algae & Blue-green algae
- Bad Odours
- Accumulated organics & scaling
- Reduce E-Coli, Faecal Coli forms, COD, TSS, BOD, FOG
- Effluent

OxyCure™ is designed for:

- Effluent & Sanitation
- Mining & Industrial
- Water Treatment

OxvFlowTM

OxyFlow provides a solution for pipe and irrigation systems, cleaning and flushing pipelines and canals as well as unblocking nozzles and filters. No control measures are required when releasing OxyFlow.

OxyFlow can be applied to:

- Piping systems with organic build-up
- Pipe systems with scale & calcification
- MRB Membranes with organics & calcification
- Drain systems
- Fat traps
- Storm water systems
- Irrigation systems
- Systems where systematic clogging occur

OxvFlow benefits:

- Cleans pipes systems, drippers, filters and sprinklers.
- Removes any organic build-up from system
- Breaks down scale & calcification
- No control measures required for discharge of product
- Applicable through once off shock treatment or continuous dosing
- OxyFlow reduces the build-up of organics and calcification in RO & UF systems.



OxyFlow[™] provides a solution to:

Irrigation

OxyFlow™ is designed for:

- Mining & Industrial
- Sports & Turf

OxyAgri™

OxyAgri is applied to improve soil conditions and release low levels of dissolved oxygen in the soil profile.

OxyAgri provides a solution to anaerobic soil conditions and the symptoms thereof by releasing low levels of dissolved oxygen as part of a biological process. It reduces organics, de-compacts the soil profile and at the same time improves water and added nutrient percolation into the profile.

OxyAgri is applied to combat black layer, anaerobic conditions, slow root development, disease-infected soil and generally to assist with aeration.

OxyAgri is the perfect solution for Polly Tunnels where anaerobic conditions are common.

OxyAgri™ provides a solution to:

- Anaerobic conditions
- Black layer and algae
- Compacted soil
- Increase dissolved oxygen inside soil profile

OxyAgri™ is designed for:

Sports & Turf

SludgeBuster™

SludgeBuster organic fibre activates digestive micro-organisms that biologically break down anaerobic, decaying material in the substrate of water bodies. It reduces ammonia peaks, bad odours and restores the ecology to a balanced state.

SludgeBuster™ provides a solution to:

- E.Coli
- COD
- Dam Algae

SludgeBuster™ is designed for:

- Effluent & Sanitation
- Water Treatment



Organic Aqua

Organic Aqua has a vast range of retail products in the ornamental fish keeping space. The success in this space together with the success with our pond products has quickly moved into the aquaculture industry and has proved to be met with much enthusiasm.

Currently test are being done in the Aquaponic and aqua scaping to further grow this exciting brand.

Below are the current Organics Aqua Products as well as some of the applications and benefits.

Pond Range Pond Oxy Aqua

Adequate levels of Dissolved Oxygen (DO) is vital for healthy aquatic life, external factors such as a radical change in temperatures, thunder storms or increase temperatures during the summer season can radically affect the levels of Dissolved Oxygen. Oxy Aqua is made from carefully selected nontoxic plant extracts to activate an increase of the DO levels. Apply especially during the warm Temperatures in summer. (1L treats 160 000L of water, bi-weekly application)

Water Care

Plant extracts that instantly make tap water safe for your fish & all aquatic life. Removes chlorine. Ensures a safe, natural home for your pet fish. Reduces stress & protects the fish against the dangerous effect of ammonia and the nitrogen cycle, especially in a new system. Stock a new system immediately when combined with Organic Aqua Filter

Activator. Reduces high maintenance and water changes. (once a month 25% water change only) Increases water clarity and keeps the water cleaner for much longer. Prevents but does not treat algae. Purchase this product for safe water, reduced stress, to

protect your fish against harmful ammonia, to reduce the high maintenance & prevent algae (500ml treats 25 000L of water & 1L treats 50 000L - once a week application)

Filter Activator

Contains plant materials that activate a healthy balance of microbes in the filter & water for

more effective filtration and biological waste reduction. It instantly "kick-starts" a new filter & allows for immediate stocking of a new system when combined with the Organic



Aqua Oxy range or Water Care. Filter Activator flocculates waste particles. This is a natural cultivated bacteria over a period of 6 to 8 weeks and contains no artificial ingredients or preservatives. Purchase this product to immediately activate effective filtration or to reduce the "running in period of a new filter" (available in 100g makes 500ml treats 5000L & 250g makes 1L and treats 12500L - apply to give the filter a kick start)

Fish Care

A mixture of essential minerals, plant particles and water soluble plant oils that ensure a healthy fish immune system. It protects your fish against the outbreak and spreading of parasitic diseases such as Ich (white spot), flukes or parasitic worms. Excellent remedy for open wounds and cysts. Contains no copper sulphate. Purchase this product for healthier fish & aquatic life. (1kg treats 5000L & 5kg treats 25 000L - one seasonal application)

Plant Care

Is made from water soluble plant oils, extracts & minerals that activate the absorption of micro nutrients through the stems and leaves of your water plants. This will ensure healthier, greener plants with beautiful leaves and water flowers. You don't need a CO² system when using Organic Aqua Plant Care. Purchase this product to increase the quality of the stems, leaves and overall vibrancy of your water plants and flowers. (1L treats 25 000L of water once a week application)

Marine Line

Marine Water Care

Marine Water Care: a combination of various plant extracts and minerals. It instantaneously removes chlorine, heavy metals and chemicals from tap water to make it safe for aquatic life.

Marine Water Care increases nitrification and protects the fish against harmful toxins such as ammonia nitrite and nitrate (nitrogen cycle).

Combine Marine Water Care with Marine Filter Activator to reduce the running in period and to safely stock your marine aquarium within 1 week after set up. Apply both products with the initial set up of your new aquarium and reapply directly before stocking. This combination also saves water as the need for regular water changes are radically reduced to once a month only (10-25% water to be changed).



Marine Filter Activator is beneficial for biological waste reduction in all marine aquariums. It is designed with an innovative green technology that uses only 100% non-toxic ingredients from plant materials & water soluble oils.

Marine Filter Activator

Marine Filter Activator will increase waste flocculation, effective filtration and improve nitrification.

Combine it with Marine Water Care for optimum water quality control; to create an aquatic balance and reduce the need for regular water changes. Reduced water changes are important to maintain the aquatic balance in your aquarium and to prevent stress and the risk of diseases.

Made from organic materials that can reduce in volume and weight over time.

Marine Fish and Coral Care

Marine Fish & Coral Care is a mixture of essential macro minerals, water soluble plant oils & plant materials that increases vitality and strength.

Benefits:

- *Stimulates coral vitality Boosts fish immune system
- *Protects the slime coat of the fish
- *Enhances natural colour in your aquarium due to good health.
- *Effective stress reliever
- *Protects aquarium against Ich (white spot), flukes or parasitic worms. *Excellent treatment for Ich flukes, parasites, open wounds and cysts (follow recommended treatment plan on www.organicaqua.co.za) contains no copper sulphate, sugar, yeast or molasses contains no preservatives

Coral Boost

Our combination of water soluble plant oils, plant extracts and minerals in CORAL BOOST stimulate the absorption of micro nutrients to create the perfect environment for corals to thrive in. It also contains natural beneficial trace elements of nitrogen, phosphorous, potassium, iron, zinc, magnesium, calcium & manganese.

*Purchase this product to boost the quality and health of corals.

SludgeBuster

SLUDGEBUSTER is made from plant fibres and essential plant extract. It contains no harmful ingredients also no sugar, molasses, yeast or copper sulphate



SLUDGEBUSTER stimulates aerobic sludge and waste decomposition and increases nitrification and dissolved oxygen levels in the filter and substrate of your marine aquarium. Use it to neutralise harmful toxins & pathogens.

- * Effective for the control of all strains of algae when combined with the Organic Aqua MARINE OXY AQUATIC
- *Made from organic materials that can reduce in volume & weight over time
- *Contains no preservatives if a white layer appear on the plant fibres, it is healthy for the fish
- *Do not change water only top up the evaporated water.

Marine Oxy Aquatic

MARINE OXY AQUATIC is a blend of essential plant extracts, water soluble oils & chloroplasts beneficial to marine aquatic life. It stimulates nitrification, increases dissolved oxygen levels and reduces harmful pathogens and dangerous toxins such as ammonia. An effective treatment for algae when combined with the Organic Aqua MARINE SLUDGEBUSTER. MARINE OXY AQUATIC will increase the water quality of your aquarium.

- * contains no copper sulphate, sugar or yeast
- * contains no preservatives
- * may contain plant particles & vary in colour *reduces the need for regular maintenance & water changes

ALGAE Products

Pond ALGAE Treatment

Reduces Eutrophication that results in algae. Blend of plant extracts that contain beneficial enzymes to radically reduce Eutrophication that result in algae blooms. Reduces TSS; TDS; COD, BOD, ammonia & nitrate (1L treats 80 000L of water, frequency of application depends on the requirements)

SludgeBuster

Biological waste reduction is beneficial for clear water. A combination of non toxic coarse

plant materials and extracts to increase the micro-organisms that will biologically break down anaerobic decaying material in the under layer of your pond which will restore the ecology of your pond to its balance state. It reduces the extreme drops in Dissolved Oxygen levels and ammonia peaks and bad odours. Use in conjunction with the Organic Aqua Algae treatment



for effective algae control. (1L treats 250m2, once off application depending on the requirements)

Aquaculture

Conventional Aquaculture includes the farming of fish, crustaceans, molluscs, aquatic plants, algae and other aquatic organisms. It also includes the fresh water & mariculture practises of which the latter refers to marine environments and under water habitats.

We can all agree that clean, healthy water is the most important aspect to determine:

- A successful industry
- Healthier produce
- Natural / fresh tasting produce

With the current world water crisis we are faced with, clean water is becoming scarcer and hypoxia (dead zone pollution), red tide and blue green algae are becoming more common factors.

For decades the focus in the industry was on mass production to optimise profits and to supply the high demand for fresh produce around the world. The chemical products, foods and other factors such as over feeding and excess of waste, have caused havoc to the environment and also now to aquaculture sectors in different areas around the world

Modern and more environmental aquaculture methods have been implemented including the deep sea Geodesic dome options but early this year (2017) the Swedish Highest Environmental Court ruled against open sea aquaculture projects and the court found that there were uncertainties regarding the assessments on the environment, and raised questions about the proposed technologies that do not provide for collection of waste feed and waste, as well as voicing doubts about the capacities of these waters to break down the resulting nutrients.

One of the most important factors in water quality control is the concern of effective methods to deal with the waste before it turns toxic and creates an increase of ammonia and a radical decrease of beneficial Dissolved Oxygen (DO) levels which destroy the micro-life in the water and under layer. Beneficial microbes are essential for the waste reduction but once there is already a decline in the DO levels, some microbes can increase this drop as it also requires DO for survival, thus causing a vicious circle that can result in Dead Zone Pollution. The toxic gas and nutrient build up that follows can result in a build up of plankton and harmful bacteria which can lead to the death of fish, other aquatic life forms, plants, reefs & the sea bed itself. Often in mariculture it can also lead to red tide which is a clear indication of a bloom of plankton that is flourishing due to nutrient-rich (polluted) water.



Of course aquaculture is not the only culprit when it comes to marine or river pollution and the local industries are as much to blame. Often the runoff from industrial and agriculture activities especially chemical fertilisers contribute and cause dead zones due to Eutrophication that results in cynobacteria - blue green algae blooms, that forms a thick layer on the surface of the water and suffocate the aquatic and microbial life. At Organic Aqua we take a holistic approach to environmental engineering and use only 100% environmental friendly products and solutions to assist the aqua culture industries to combat pollution and prevent heavy EPA fines or financial loss due to dying produce. Our inventions are backed by scientific data that we pass openly onto our customers, so that the superiority of our products and technology are obvious in the value to our client.

Our focus:

- Improve the water quality naturally
- Biological waste reduction
- Increase Dissolved Oxygen levels
- Eliminate Eutrophication before it results in cynobacteria and blue green algae
- Neutralise toxic gasses
- Increase spawning & growth
- Boost the growth and health of the produce
- Ensure natural (better) tasting produce
- Restore dead zone areas
- Identify point source pollution factors and offer natural rehabilitation solutions

precious water resources while having a positive impact on the environment. Balance is key and our products offer just that while ensuring the aquatic environment is disease & stress free with adequate Dissolved Oxygen levels & beneficial microbes for fish and aquatic life to thrive in. "Prevention is better than cure" is our motto with an added dosage & application bonus.