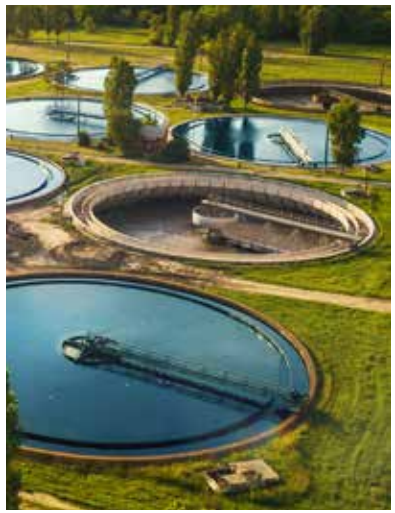
HUMA®




ENVIRONMENTAL PRODUCT CATALOG

Huma® was founded in 1973 by my father, Dr. Jordan Smith, with a vision centered on trust, care, and long-term commitment to people and the land. Originally known as Sunburst Mining Company®, it evolved through Bio Huma Netics® and its brands, ultimately becoming Huma®, Inc. Today, despite many changes, the company's core values remain unchanged.

Huma, Inc. is a family-owned business that has been passed down through three generations with a focus on integrity and improving global agriculture through humic-based products and technologies. The legacy continues today with the involvement of multiple family members, including our children into the third generation.

Dr. Smith and Mr. Don Organ began applying a unique humate material from a mine in the Northwestern United States to farmlands across the United States. This material, rich in organic acids and minerals, had a direct impact on soil health, improving soil quality and enhancing nutrient uptake and yield in crops. It was an innovation that laid the groundwork for what we would go on to achieve.

By the early 1980s, Dr. Smith and Mr. Organ developed a proprietary process to extract beneficial organic acids, minerals, and other components, which became the foundation of Micro Carbon Technology®. This technology is now a core ingredient in the carbon-rich liquid products offered today.

For over 50 years now, we've focused on researching and responsibly harvesting Mother Nature's ancient organics and creating lasting value, not just for today, but for the future. From humble beginnings, the company has grown into a global leader in humic substances, now registered in over 40 countries, while remaining true to its roots.

We value tradition and believe in partnering with like-minded family-owned businesses, such as Mesa Verde Humates® and Gro-Power®, to support agriculture and the environment. These partnerships, based on shared values, have strengthened Huma's ability to help you succeed.

We take immense pride in our history, but we're even more excited about the future. As we move forward, we're committed to providing innovative, sustainable biostimulant-based solutions that not only help your business grow but also preserve the land, water, and soil for generations to come. This legacy of trust, responsibility, and care isn't just something we've inherited—it's the foundation on which we lead every day. And we're ready to continue this journey with you, because we're simply better together!

Lyndon W. Smith
CEO, HUMA, INC.

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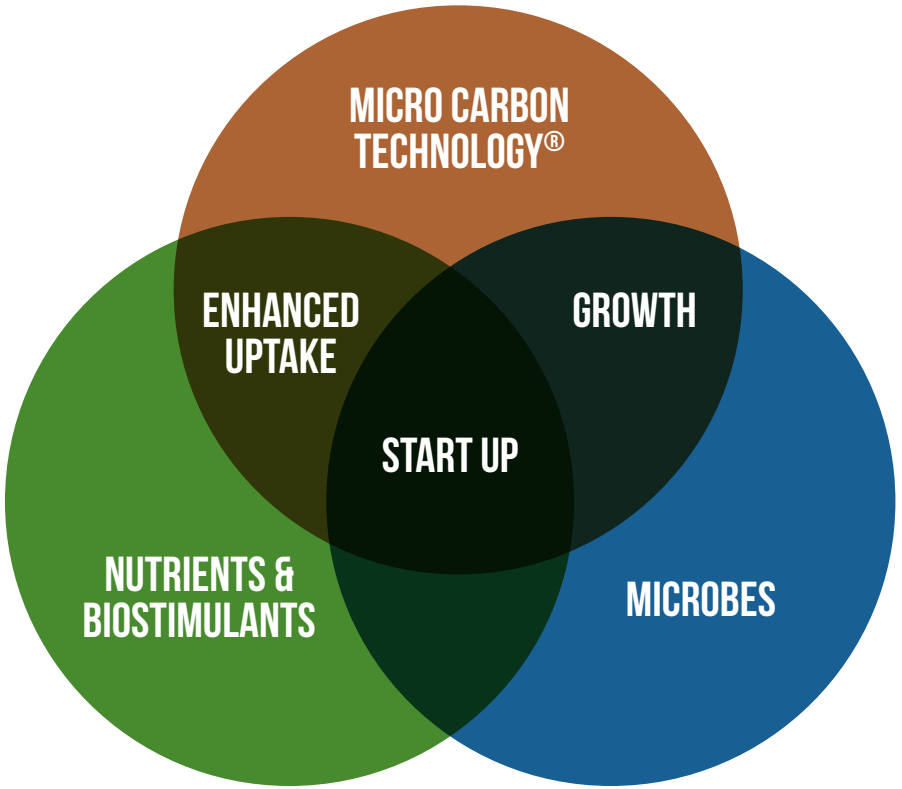


HUMA® IS DEDICATED TO IMPROVING YOUR WASTEWATER & SOIL HEALTH.

Formed from prehistoric plant material, our humic-based carbon-rich products are millions of years in the making, providing you with greener solutions and a greener bottom line.

Owning humate mines in Idaho and New Mexico enables us to control every step of production, ensuring high quality. Our raw humate products are harvested, screened, and packaged in New Mexico, while our finished liquid products are extracted, blended, and packaged in Arizona.

Our liquid formulations are powered by our proprietary Micro Carbon Technology®, which ensures fast-acting delivery and exceptional uptake enhancement, while being an environmentally friendly biostimulant. We focus on innovating and improving the use of humic substances to support soil and wastewater health globally.

WHY CHOOSE HUMA?

Leveraging our extensive research and knowledge, Huma® reflects both the strength and nurture of Mother Nature. **We're industry innovators with over 50 years of experience providing** transformative products and industry-leading research & development in the following categories:

ENVIRONMENTAL

No matter your wastewater or soil remediation challenge, our products offer cost-effective, high-quality treatment using our proprietary Micro Carbon Technology® for superior delivery and absorption—improving results while saving you money.

AGRICULTURE

We offer carbon-based humic solutions for conventional and organic farming. Our products include macronutrients, micronutrients, organic biopesticides, growth enhancers, and soil fertility boosters. Designed to improve nutrient uptake, soil and plant health, and crop protection, Huma supports higher yields and sustainable agriculture.

TURF & ORNAMENTAL

Our natural liquid and dry fertilizers and soil conditioners simplify turf and ornamental management by enhancing soil, turf, and plant health. Explore a range of science-backed solutions for commercial applications, home gardening, sports fields, golf courses, and nurseries to meet diverse turf, soil health, and landscaping needs.

TECH ADDITIVES

Our high-quality raw humates and Micro Carbon Technology® are used to create customizable humic-based additives for a variety of applications. These versatile additives can be easily integrated into your products to enhance performance, boost efficiency, and improve results.

MADE IN THE USA

MICRO CARBON TECHNOLOGY

HUMA'S LIQUID PRODUCTS CONTAIN A UNIQUE PROPRIETARY BLEND OF HUMIC AND MICRO CARBON TECHNOLOGIES®, NATURAL BIOSTIMULANTS, AND ESSENTIAL NUTRIENTS.

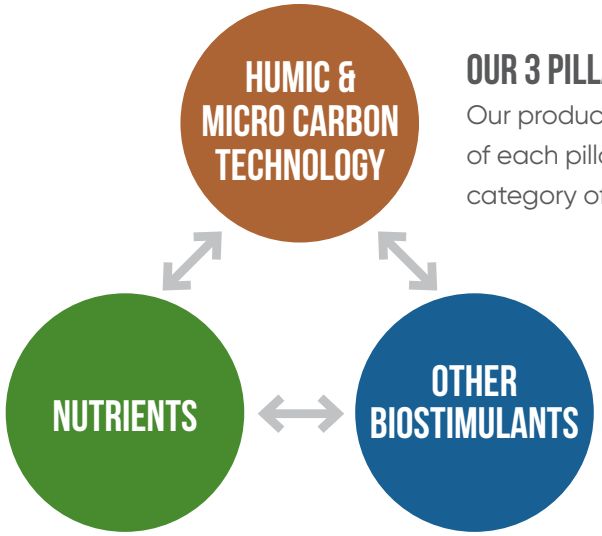
Each product has its own unique formulation, which is designed to meet the specific needs of its category, ensuring maximum effectiveness and results.

WHAT IS MICRO CARBON TECHNOLOGY?

Micro Carbon Technology (MCT) is a proprietary blend of unique organic molecules rich in carbon, oxygen, and colloidal minerals. These molecules quickly and efficiently transport nutrients to other microorganisms thereby enhancing treatment.

WHERE DOES MCT COME FROM?

MCT originated in 1973 when our scientists discovered a unique organic material that enhanced both soil remediation and wastewater. This material is a highly oxidized, unique humate that has not been compressed or heated into coal.



OUR 3 PILLARS:

Our products contain a portion of each pillar, depending on the category of product.

WHAT MAKES HUMA® PRODUCTS UNIQUE?

Using MCT as the base, we have developed highly effective products for virtually every type of application.

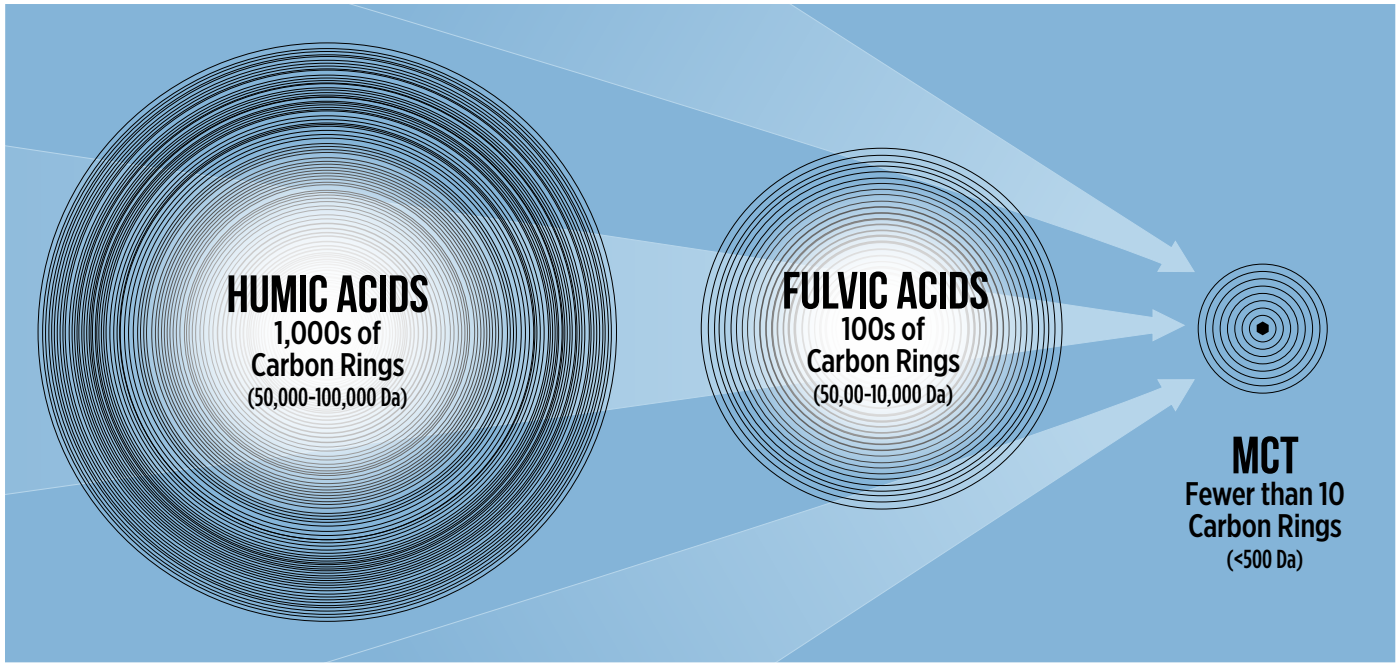
THESE PRODUCTS:

- Enhance Activity & Diversity of Beneficial Microrganisms in both Wastewater & Soil
- Improve Remediation of Soil
- Reduces Sludge Build-up & Handling Costs by lowering BOD/COD & Reducing FOG
- Boost Nutrient Availability & Uptake

HOW DOES MCT PRODUCE RESULTS?

The size of the carbon molecules makes all the difference. The significantly smaller particle mass allows nutrients to be transported through cellular material at a much higher rate.

- Greater Bioavailability: Most Efficient Way to Transport
- Nutrients into the Soil/Water
- Achieve Far More with Less Product
  (Lower Volume & Less Product to Handle)
- Fast-acting Source of Carbon
- Rapidly Activates Beneficial Microbes
- Environmentally Friendly
- Natural Biostimulant



Molecule size comparison of humic acids, fulvic acids, and Micro Carbon Technology (MCT).

KEY BENEFITS OF MICRO CARBON TECHNOLOGY (MCT)

NON-SELECTIVE: works with both metallic (+) and non-metallic (-) ions.

VERSATILE DELIVERY: can be applied by hand or peristaltic pump into influent, RAS, trouble areas or collections.

LOW ENERGY: requires less microbial effort to uptake nutrients, and protects nutrients from being tied up.

Micro Carbon Technology®

INDUSTRIAL

INDUSTRIAL

WASTEWATER PROCESSING

Industrial wastewater from sectors including pulp and paper, oil and gas, automotive, and plastic production often contains harsh chemicals and is nutrient-deficient. These deficiencies are a common challenge that can significantly hinder natural bioremediation and overall treatment efficiency.

OIL & GAS

These processors face the challenge of breaking down long-chain hydrocarbons. To enhance this process, additional products may be required to reduce the surface tension of these hydrocarbons, allowing microorganisms to more effectively carry out biodegradation.

PULP & PAPER

These systems can quickly become upset by sudden fiber overloads, and paper making chemistries requiring additional microbes and nutrients to restore balance. Other challenges include bulking, filamentous bacteria, and reducing BOD, COD, TSS, and turbidity.

FOOD & BEVERAGE

These processors often face undersized and poorly adapted treatment systems. Nutrient-poor wastewater can cause odors, high BOD/COD, FOG buildup, sludge bulking, foaming, poor settling, excessive sludge, and permit compliance issues.

MUNICIPAL

MUNICIPAL

WASTEWATER PROCESSING

Municipal wastewater treatment systems must adapt to constantly changing flows and contaminants, requiring operators to respond quickly and effectively. Consistent performance depends on carefully monitoring the system's biology and harnessing it to break down and remove pollutants from the waste stream.

ACTIVATED SLUDGE

Activated sludge systems use a mix of aerobic, facultative, and sometimes anaerobic processes to drive microbial treatment. Common challenges include biomass recovery, foaming, poor settling, and excess sludge.

LAGOONS

Lagoon wastewater systems often face costly sludge removal, excess BOD, and persistent odors. Our bioremediation solution addresses these problems, even in the winter, reducing expenses and keeping lagoons running.

SEPTIC

Commercial septic systems can overflow and contaminate surrounding areas if not properly managed. Managing the system's microbiology with our biostimulants and bioaugmentation products offers a more efficient, cost-effective solution to keep microbes active as well as revive dormant systems.

ODORS

In collection systems FOG, septic and the building up of Hydrogen Sulfide gas creates an environment susceptible to generating odors. The key is to evaluate the issue and address the root causes.

AQUACULTURE

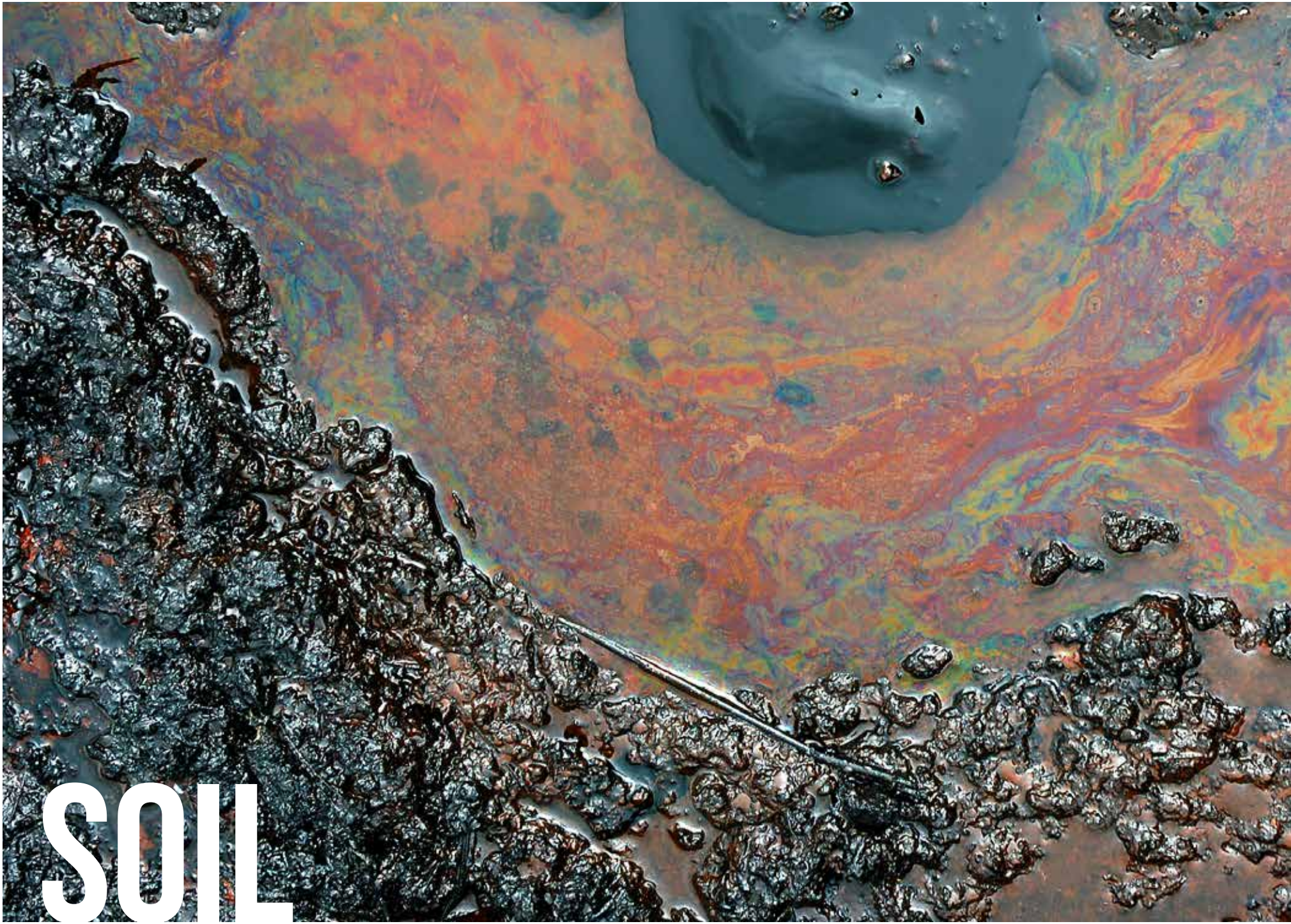
AQUACULTURE

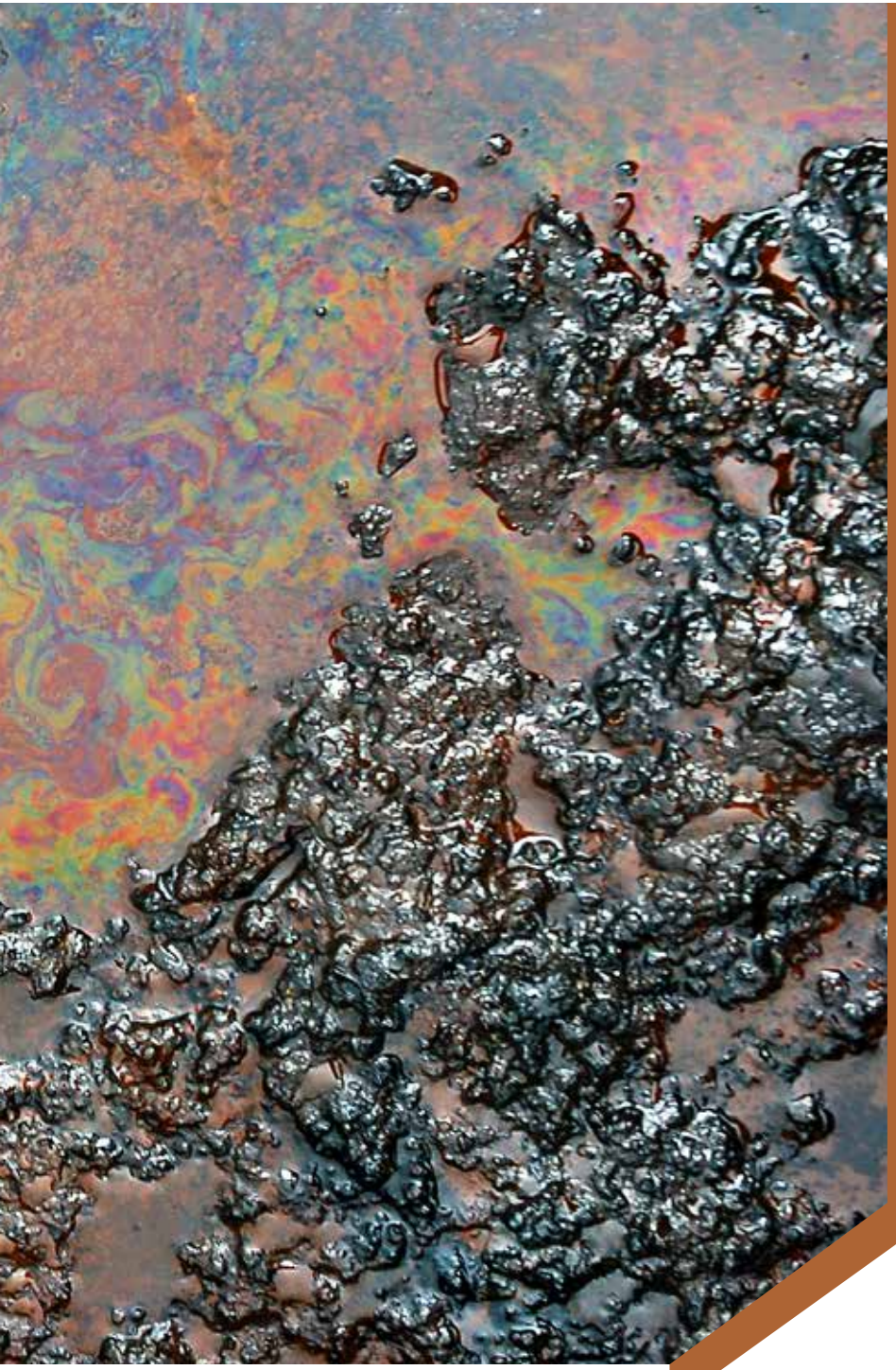
BIOREMEDIATION

A sustainable approach to maintaining water quality and ecosystem health in aquaculture environments. Our products are formulated to improve water quality, stabilize microbial biomass, improve biofloc, reduce mortality, and improve aquaculture (like fish farms or shrimp ponds).

AQUACULTURE

Fish, shellfish, and algae farming require keeping the water column free of waste solids and ammonia while organisms live in it. Bioremediation using targeted non toxic microorganisms can solve this.


SOIL



SOIL

BIOREMEDIATION

Bioremediation uses natural soil microbes to break down contaminants, often aided by specialized microbes, nutrients, biostimulants, soil activators, and surfactants. By enhancing natural soil microbiology, this process breaks down pollutants, restores soil health, and safeguards water sources more quickly than would occur naturally.

SOIL BIOREMEDIATION

Soil bioremediation harnesses natural soil microbes, specialized nutrients, biostimulants, and surfactants to break down contaminants such as petroleum hydrocarbons, oils, and chemicals that impact soil and threaten water sources. When properly managed, it effectively reduces pollutants, restores soil function, and protects water quality.

BIO DREDGE®

A blend of organic acids, nutrients, and biological components that accelerate sludge breakdown. BIO DREDGE supports native microbes and promotes a "wet burn" process that converts sludge into harmless gases.

BENEFITS AT-A-GLANCE:

- Boosts dissolved oxygen levels, enabling aeration energy savings
- Eliminates need for costly mechanical dredging & downtime
- Controls odor & volatile emissions
- Continuously reduces sludge buildup in lagoons & ponds
- Lowers BOD/COD for improved water quality

APPLICATION RATES:

FOR LAGOONS & PONDS:
Initial Application: Up to 10 ppm
Maintenance Dosage: Up to 4 ppm

BIO ENERGIZER®

Boosts microbial performance without adding new bacteria or inoculants—BIO ENERGIZER enhances existing populations using 30+ nutrients, and organic compounds.

BENEFITS AT-A-GLANCE:

- Stimulates natural microbes for faster bio-oxidation
- Reduces sludge accumulation & handling costs
- Lowers BOD/COD & FOG, while also minimizing odors
- Enhances dissolved oxygen levels & flocculation

APPLICATION RATES:

WASTEWATER TREATMENT LAGOON:
Up to 10 ppm injected directly into the influent for the initial phase (typically 30–180 days) to activate lagoon.

Thereafter, add up to 5 ppm per day into the influent.

AERATION BASINS & DIGESTERS:
Up to 7 ppm into the water flow during the initial phase.
Up to 5 ppm into the water flow for maintenance.

BIO GENESIS®

A blend of nutrients, organic acids, and biological stimulants that boosts microbial activity in activated sludge systems.

BENEFITS AT-A-GLANCE:

- Enhances flocculation, settle-ability, & improves SVI
- Maintains dissolved oxygen & cuts aeration energy use
- Reduces BOD/COD, FOG, odors, foaming, & filamentous bacteria
- Cuts chemical usage & associated costs
- Lower sludge volume, waste handling, & downtime

APPLICATION RATES:

AERATION BASINS, DIGESTERS, & OXIDATION DITCHES:
Initial Application: Up to 10 ppm
Maintenance Dosage: Up to 5 ppm

HOW TO USE FLYER

APPLICATION RATES:

COD: 1,100,000 mg/L.
Dosing is project and system dependent.
Please contact your Huma® representative for specific application directions.

CARBON-CH™

A safe, liquid carbon that biostimulates microbial growth in systems low on BOD or carbon for denitrification.

BENEFITS AT-A-GLANCE:

- Stimulates & maintains native microbial populations
- Provides a reliable carbon source when the inlet BOD is insufficient
- Enhances denitrification efficiency in nitrogen-removal systems
- Nonhazardous & easy to handle

5-0-0 ENCAPSALT®

A soil activator combined with surfactants, to reduce salt stress in soil, improve water penetration, break up hard, crusty soils, and help flush salts deeper into the soil.

BENEFITS AT-A-GLANCE:

- Buffers salts in highly alkaline or sodium-rich soils
- Improves soil conditions for aerobic microbial activity
- Aerates soil & flocculates clay particles
- Enhances water penetration
- Increases nutrient availability for easier microbial uptake

APPLICATION RATES:

- SOLID BANDED OR INJECTED THROUGH DRIP TAPE/MICRO SPRINKLERS: Up to 2 oz/1,000 sq ft or Up to 2 qt/ac, 2.5 L/ha
- SOIL BROADCAST SPRAY INCORPORATED, FLOOD OR FURROW IRRIGATED: Up to 3 oz/1,000 sq ft or Up to 3 qt/ac, 7.5 L/ha

APPLICATION RATES:

SOIL:
Up to 4 gallons per acre (40 L/ha) by aerial or ground spray

Every 2 to 4 weeks until contaminant is reduced

FULVI PRO®

An activated liquid fulvic acid source derived from highly oxidized humic substances.

BENEFITS AT-A-GLANCE:

- Carbon food source for the beneficial microbes
- Biostimulant
- Fulvic acid complexed with Micro Carbon Technology
- Helps in the remediation of soils contaminated with nitrogen, phosphorous, herbicides, or pesticides

0-0-2 / HUMA PRO® 16

HUMA PRO 16, carbon-complexed with Micro Carbon Technology®, is an activated liquid humic acid source derived from a highly oxidized, naturally occurring carbon and mineral deposit.

BENEFITS AT-A-GLANCE:

- Replenishes available carbon in depleted soils
- Enhances beneficial microbial growth & diversity
- Improves soil structure & nutrient cycling
- Boosts natural bio-oxidation & respiration processes

APPLICATION RATES:

SOIL:
Up to 4 gallons/ac (40 L/ha) by aerial or ground spray
Use every 2–4 weeks until contaminant is reduced

KLEENUP™

A formulation that improves soil aeration, water holding capacity, and creates a healthier soil environment. KLEENUP buffers heavy metals and breaks down hydrocarbons to speed chemical residue degradation.

BENEFITS AT-A-GLANCE:

- Aids breakdown of chemical & petroleum contaminants in soil
- Helps detoxify chemical residues
- Stimulates & improves aeration
- Enhances water-holding capacity & softens hard soils

APPLICATION RATES:

SOIL:
Initial- Up to 3 quarts/ac, 7.5 liters/ha
Maintenance- Up to 2 quarts/ac, 5 liters/ha

WATER:
Initial- Up to 7 ppm
Maintenance- Up to 4 ppm

MAX PAK®

Delivers a balanced blend of micronutrients and salt-buffering to support a diverse and resilient microbial ecosystem.

BENEFITS AT-A-GLANCE:

- Boosts biological treatment performance
- Supports resilience against toxic loads or operational upsets
- Enhances stability in nutritionally deficient municipal & industrial systems

APPLICATION RATES:

WASTEWATER:
Based on micronutrient water analysis

SOIL:
Based on soil nutrient analysis and remediation goals

APPLICATION RATES:

SOIL:
1 gallon/ac by aerial or ground spray
Use every 2–4 weeks until contaminant is reduced

WATER UPSET:
Up to 10 ppm by spray application or direct injection into water flow

WATER MAINTENANCE:
Up to 5 ppm by spray application or direct injection into water flow

MICATROL®

Accelerates microbial breakdown of chemical and petroleum compounds, converting toxins into carbon dioxide, water, and humus. MICATROL improves nutrient delivery and buffers microbiology from harmful compounds.

BENEFITS AT-A-GLANCE:

- Catalyzes the breakdown of hydrocarbons & chemical organics
- Promotes microbial growth & activity for more complete bioremediation
- Buffers & protects native biocultures from toxic compounds
- Enhances overall wastewater treatment performance & reduces operating costs

MICROPLEX® AD

Restores and enhances anaerobic digester microbiology performance with a balanced blend of micronutrients, microbes, and growth enhancers.

BENEFITS AT-A-GLANCE:

- Re-establishes or boosts microbial activity in anaerobic sludge digesters
- Maintains grease-degrading microbial populations for consistent gas production
- Supports performance under toxic, inhibitory, or cold-weather conditions
- Ideal for reseeding or rehabilitating sour or inactive digesters

APPLICATION RATES:

NORMAL/MAINTENANCE: Minimum 0.5 lb (0.2 kg) or up to 5 lb (2.25 kg) per 1000 gal (4,000 L)

APPLICATION RATES:

NORMAL/MAINTENANCE PER HECTARE:
Up to 0.5 lb (0.25 kg) minimum/Up to 1 lb (0.50 kg) maximum

START-UP:
Up to 1 lb (0.50 kg) minimum/Up to 2 lb (1 kg) maximum

MICROPLEX® AQF

Improves fish aquaculture by delivering a blend of aerobic and facultative bacteria plus flocculants that support healthy pond ecosystems.

BENEFITS AT-A-GLANCE:

- Enhances water quality in fish ponds
- Stabilizes microbial biomass & biofloc
- Reduces fish mortality
- Promotes overall growth & fish health as a preventive maintenance program

MICROPLEX® AQL

Supports healthier lakes, ponds, and lagoons with a targeted blend of aerobic and facultative bacteria plus flocculants designed to naturally clarify slow-moving water bodies.

BENEFITS AT-A-GLANCE:

- Boosts water quality through stabilized microbial ecosystems
- Improves water clarity by reducing suspended solids
- Reduces aquatic life stress & mortality
- Decreases odor & organic buildup
- Suitable as preventive maintenance for continuous ecosystem health

APPLICATION RATES:

NORMAL/MAINTENANCE: Per MG/per 1,000 m3
Up to 0.5 lb (0.25 kg) minimum/Up to 2 lb (1 kg) maximum

START-UP:
Up to 15 lb (6.8 kg) minimum/Up to 25 lb (11.4 kg) maximum

MICROPLEX® AQS

Enhances shrimp aquaculture with an expert blend of aerobic and facultative bacteria plus flocculant aids.

BENEFITS AT-A-GLANCE:

- Improves water quality & clarity for healthier shrimp
- Stabilizes microbial biomass & biofloc formation
- Reduces shrimp mortality & enhances survival rates
- Promotes better growth, health, & product quality

APPLICATION RATES:

NORMAL/MAINTENANCE HECTARE:
Up to 0.5 lb (0.25 kg) minimum/Up to 1 lb (0.50 kg) maximum

START-UP:
Up to 1 lb (0.50 kg) minimum/Up to 2 lb (1 kg) maximum

MICROPLEX® C

A dry blend of bacteria that rapidly degrades tough or toxic organic compounds in industrial wastewater. MICROPLEX C helps remediate waste from refineries, textiles, metals, pharmaceuticals, and chemical plants, improving system performance and reliability.

BENEFITS AT-A-GLANCE:

- Rapidly degrades toxic or persistent organics
- Improves system reliability
- Enhances industrial wastewater treatments

APPLICATION RATES:

NORMAL/MAINTENANCE HECTARE:
Per MGD (1,000 m3/day)
Up to 1 lbs; (0.5 kg) min/Up to 4 lbs; (1.75 kg) max

START-UP/UPSET:
Up to 20 lbs; (9 kg) min/Up to 40 lbs; (18 kg) max

SEVERE UPSET:
Up to 30 lbs; (14 kg) min/Up to 60 lbs; (27 kg) max

APPLICATION RATES:

NORMAL/MAINTENANCE HECTARE:
Per MGD (1,000 m3/day)
Up to 1 lbs; (0.5 kg) min/Up to 4 lbs; (1.75 kg) max

START-UP/UPSET:
Up to 15 lbs; (7 kg) min/Up to 30 lbs; (18 kg) max

SEVERE UPSET:
Up to 25 lbs; (11 kg) min/ Up to 50 lbs; (23 kg) max

MICROPLEX® DN

Enhances denitrification with facultative anaerobic microbes that reduce nitrates and nitrites. MICROPLEX DN restores and maintains system performance under toxic, cold, or inhibitory conditions in municipal and industrial wastewater.

BENEFITS AT-A-GLANCE:

- Restores denitrification
- Minimizes system upset & downtime
- Enhances overall treatment performance & stability

MICROPLEX® FL

Combines microbes, enzymes, and surfactants to improve treatment in facultative lagoons. MICROPLEX FL breaks down grease, protein, fiber, and other wastes, reducing odors and improving system performance for municipal, industrial, and dairy facilities.

BENEFITS AT-A-GLANCE:

- Reduces odors & improves water quality
- Breaks down waste
- Supports better sludge settle-ability & natural floc formation

APPLICATION RATES:

NORMAL/MAINTENANCE HECTARE:
Per MGD (1,000 m3/day)
Up to 1 lbs; (0.5 kg) min/Up to 4 lbs; (1.75 kg) max

START-UP/UPSET:
Up to 15 lbs; (7 kg) min/Up to 30 lbs; (18 kg) max

SEVERE UPSET:
Up to 25 lbs; (11 kg) min/ Up to 50 lbs; (23 kg) max

APPLICATION RATES:

NORMAL/MAINTENANCE HECTARE:
Per MGD (1,000 m3/day)
Up to 1 lbs; (0.5 kg) min/Up to 4 lbs; (1.75 kg) max

START-UP/UPSET:
Up to 15 lbs; (7 kg) min/Up to 30 lbs; (18 kg) max

SEVERE UPSET:
Up to 25 lbs; (11 kg) min/ Up to 50 lbs; (23 kg) max

MICROPLEX® FLP

A dry blend of natural microbes, enzymes, and surfactants designed to enhance the treatment of pulp, paper, and other industrial wastes in facultative lagoons.

BENEFITS AT-A-GLANCE:

- Breaks down lignins, cellulose, fibers, & surfactants
- Reduces solids & odors
- Improves plant performance & efficiency

MICROPLEX® FOG

A specially formulated microbial blend designed to break down fats, oils, and grease (FOG) in sewer systems, lift stations, drains, and grease traps.

BENEFITS AT-A-GLANCE:

- Reduces FOG buildup & associated odors
- Promotes natural digestion of FOG, preventing clogging
- Enhances overall system efficiency & reduces maintenance needs

APPLICATION RATES:

- LIFT STATION (1,000,000 GPD): 3–5 lb/day
- WASTEWATER TREATMENT SYSTEM:
  Start-up/Recovery 25–50 lb/day
  Maintenance 1–5 lb/day

MICROPLEX® HC

A liquid concentrate of natural bacteria that breaks down petroleum hydrocarbons like crude oil, gasoline, diesel, and lubricants.

BENEFITS AT-A-GLANCE:

- Effectively treats BTEX compounds & aromatic contaminants
- Ideal for bioremediation of polluted soils & industrial wastes
- Enhances natural degradation processes, reducing environmental impact

APPLICATION RATES:

MAINTENANCE DOSE:
Dose per Cubic Yard (0.76 cubic meters)
0.5 gal of mix; (2.0 L of mix) min/ 1.0 gal of mix; (4.0 L of mix) max

START-UP/SHOCK TREATMENT:
1.0 gal of mix; (4.0 L of mix)
2.0 gal of mix; (8.0 L of mix)

MICROPLEX® HCD

Combines specialized microbes and activated carbon to treat industrial wastewater containing hydrocarbons and toxic organics. MICROPLEX HCD immobilizes low-level toxins and boosts biodegradation of difficult-to-degrade compounds.

BENEFITS AT-A-GLANCE:

- Breaks down a broad range of man-made organic compounds
- Immobilizes low-level toxicants in the wastewater stream
- Enhances effectiveness in wastewater treatment facilities

APPLICATION RATES:

NORMAL/MAINTENANCE HECTARE:
Per MGD (1,000 m3/day)
Up to 1 lbs; (0.5 kg) min/Up to 4 lbs; (1.75 kg) max

START-UP/UPSET:
Up to 20 lbs; (9 kg) min/Up to 40 lbs; (18 kg) max

SEVERE UPSET:
Up to 30 lbs; (14 kg) min/Up to 60 lbs; (27 kg) max

MICROPLEX® HS

A liquid suspension of anaerobic microbes designed to reduce hydrogen sulfide odors in wastewater systems.

APPLICATION RATES:

NORMAL/MAINTENANCE:
Per MGD (1,000 m3/day)
Up to 1.5 gal; (5.7 L) min/Up to 30 gal; (150 L) max

START-UP/SHOCK TREATMENT:
Up to 5.0 gal; (19 L) min/Up to 40 gal; (300 L) max

BENEFITS AT-A-GLANCE:

- Reduces hydrogen sulfide odors in sewer lines, lagoons, & sludge processing
- Improves biodegradation of solids & sludge under anaerobic conditions
- Enhances overall system performance by promoting natural digestion of organic matter

MICROPLEX® JS

A two-part formulation with live bacteria that rapidly breaks down solids, fats, proteins, hydrocarbons, and other organic compounds in wastewater systems.

BENEFITS AT-A-GLANCE:

- Accelerates system recovery in new or stressed wastewater systems
- Reduces sludge buildup & lowers BOD/COD levels
- Controls FOG & cuts odors
- Enhances bio-oxidation capacity, improving overall treatment performance

APPLICATION RATES:

WITHIN FLOW RANGE: gpd, (m3/d)
up to 10,000, (100):
0.15 gal or 20 ounces, (0.6 L) min/1.8 gal, (6.8 L) max

10,001 to 100,000, (100 to 1,000):
0.5 gal, (1.9 L) min/5.0 gal, (19 L) max

100,001 to 1,000,000, (1,001 to 10,000):
5.0 gal, (19 L) min/50.0 gal, (190 L) ma

MICROPLEX® LM

A dry blend of microbes and enzymes that liquefies and deodorizes animal waste, making manure easier to handle and enhancing its fertilizer value. MICROPLEX LM helps retain nitrogen, reduce odors, and improve the reuse of stored animal droppings.

APPLICATION RATES:

MANURE PIT DOSING: per 10,000 gal of pit volume; (per 100.0 m3/day)

NORMAL/MAINTENANCE HECTARE:
0.5 lb/week; (0.25 kg/week)

START-UP/CRUST REMOVAL:
5 lb at once (per week); (2.25 kg at once per week)

BENEFITS AT-A-GLANCE:

- Liquefies solid manure for easier handling & storage
- Reduces unpleasant odors in barns & lagoons
- Preserves nitrogen content, boosting fertilizer value
- Simplifies transport & application of animal waste

NUTRIPLEX®

A multi-nutrient blend that energizes existing microbes in nutrient-deficient environments, accelerating biodegradation of organic and chemical contaminants.

BENEFITS AT-A-GLANCE:

- Enhances breakdown of petroleum, industrial, & organic contaminants
- Supports efficient bio-oxidation in soil & water systems
- Boosts microbial activity & diversity
- Complements other treatment products in integrated remediation programs

APPLICATION RATES:

INITIAL APPLICATION—SPRAY SURFACE EVENLY:
Up to 10 qts/ac (23.5 liters/ha) /Up to 10 ppm per volume

INTERMEDIATE APPLICATION—spray suraface evenly: Up to 5 qts/ac (11.5 liters/ha) /Up to 5 ppm per volume

MAINTENANCE DOSAGE—spray surface evenly:
Up to 1 qt/ac (2.5 liters/ha)/Up to 2 ppm per volume

WASTEWATER:
Based on nutrient water analysis

BROADCAST APPLICATION RATES:

- SOIL BANDED, BROADCAST OR SIDE DRESSED:
  75 lb/ac, 75 kg/ha up to 300 lb/ac
  Contact your representative for more information.

OMRI LISTED
For Organic Use

OM 1-3 mm

OM 1–3 mm is a ground and screened product with less than 3% dust, making it ideal for mixing with other dry materials that are not hygroscopic. OM 1-3 mm can be broadcast or banded.

BENEFITS AT-A-GLANCE:

- Clean, consistent granule for easy blending
- Ideal for microbial carrier or carbon amendment
- Stable blending with other dry remediation products

PHYTO-MAX®

Supports water systems by promoting a healthy green phytoplankton bloom in open water systems. PHYTO-MAX reduces incidences with blue green algae enhancing natural treatment processes.

BENEFITS AT-A-GLANCE:

- Enhances healthy phytoplankton growth
- Improves overall water quality & stability
- Enhances nutrient uptake & organic processing
- Supports balances microbial ecosystems in ponds & lakes

APPLICATION RATES:

INITIAL APPLICATION: Up to 200 ppm spread evenly over surface

MAINTENANCE DOSAGE: Up to 100 ppm spread evenly over surface

APPLICATION RATES:

ACTIVATED SLUDGE PLANTS:
Up to 2.5 lb /100 lb BOD ≈ 0.25 gal /100 lb BOD

STABILIZATION BASINS:
Up to 2.5 lb /100 lb BOD ≈ 0.25 gal /100 lb BOD

COLLECTION SYSTEMS: Up to 3ppm/flow

SUPER NITRO®

30-0-0

A highly stable source of nitrogen for both wastewater and soil remediation. SUPER NITRO helps meet recommended BOD:N ratio of 100mg/L:5-10mg/L. It enhances cellular respiration and helps build essential compounds like proteins, plant concern, and nucleic acids.

BENEFITS AT-A-GLANCE:

- Due to increased efficiency from MCT, 1 gallon is equivalent to 10 lbs N
- Neutral pH for better tank compatibility
- Can be mixed with other nutrients for ease of application
- Resists nitrogen leaching & volatilization in soil applications

0-50-0 SUPER PHOS®

A high-phosphorus source and is 6 times more efficient than conventional phosphoric acid. SUPER PHOS enhances the production of amino acids, proteins, and carbohydrates necessary for cellular division and microbial development.

BENEFITS AT-A-GLANCE:

- Due to increased efficiency from MCT, 1 gallon is equivalent to 50 lbs P_2O_5
- Reduces phosphorus discharge in effluent
- Enhances COD/BOD removal
- Boosts biological species diversity
- Lowers sludge production & foaming

APPLICATION RATES:

- ACTIVATED SLUDGE PLANTS:
  Up to 0.5 kg / 100 kg BOD
- STABILIZATION BASINS:
  Up to 0.5 kg / 100 kg BOD
- IN WASTEWATER STABILIZATION PONDS:
  Up to 1 qt /ac spray over surface of pond to stimulate algae growth

APPLICATION RATES:

BROADCAST SPRAY:
Up to 6 oz/1000 ft2, 210 mL/100 m2

Up to 2 gallon/ac, 20 liters/ha

ZAP®

8-0-0

Rapidly stimulates microbes to break down hydrocarbons, accelerating soil and groundwater remediation. ZAP feeds a strong, vigorous soil biology, which indirectly results in the natural improvement of soil health.

BENEFITS AT-A-GLANCE:

- Fastest way to boost native microbial activity
- Supports complete bioremediation
- Speeds hydrocarbon degradation
- Builds a vigorous microbial community & balance

HUMA®

World Leader in Humates

1331 W. Houston Ave., Gilbert, AZ 85233

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