



## Formula 1 Product Catalog 2025



Updated September 16, 2025

[www.dutchdirect.us](http://www.dutchdirect.us)



Designed for cannabis cultivation, Formula 1 features a wide range of products, including fertilizers, supplements, biostimulants, integrated pest management (IPM) solutions, and cleaner/water sanitizers. We provide all the essentials to boost your harvest and maintain healthy crops.

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Our fertilizers provide complete macro and micronutrient profiles in precision-balanced ratios for optimal plant development.

# Calcium Nitrate

15.5-0-0+26.3(CaO)

Our premium Calcium Nitrate is engineered for maximum purity and rapid dissolution, delivering essential calcium and nitrogen for superior plant development. Calcium Nitrate optimizes nitrogen content and enhances calcium uptake, ensuring robust plant structure and improved quality.

Use Calcium Nitrate as a base throughout the crop's life cycle.

## Key Benefits



Rapid nutrient delivery: Highly soluble formula ensures quick absorption of essential calcium and nitrogen, promoting vigorous growth from seedling to harvest.

Strengthens plant structure: Provides readily available calcium for strong cell walls, leading to improved stress tolerance and resistance to lodging.

Suitable for various applications: Compatible with fertigation and dosing systems.

Compatibility: Suitable for hydroponic, greenhouse, and outdoor applications as a base throughout the crop's life cycle.

## Advantages

- Optimized Ca and N ratio: The balanced nutrient combination maximizes calcium uptake and utilization, supporting optimal plant development and yield.

## Product Characteristics

- Low in heavy metals and sodium.
- Water-soluble white granules.



Scan for application rate details and product information.

## Different Applications



Greenhouse



Foliar Fertigation



Open Field Fertigation

## Guaranteed Analysis (%w/w)

|                          |       |
|--------------------------|-------|
| Total Nitrogen (N) ..... | 15.5% |
| 1.2% Ammoniacal Nitrogen |       |
| 14.3% Nitrate Nitrogen   |       |
| Calcium (Ca) .....       | 18.8% |

Derived from: Calcium Ammonium Nitrate

## Compatibility

A compatibility test is recommended before applying this product as a mixture. Keep the product in its original packaging. Store in a cool, dry place. Do not expose to direct sunlight.

## Packaging



25kg

\*Subject to availability in our warehouse stock.



Page 4

# Veg Water-Soluble NPK

## 4-7-25+9 (MgO)+(TE)

Veg WS NPK is a performance-driven formula engineered for vigorous vegetative growth and superior plant development. Our balanced 4-7-25 ratio, enhanced with magnesium and essential trace elements, delivers optimal nutrition for robust root development, sturdy stems, and lush foliage.

Each granule is packed with readily available nutrients, ensuring your plants achieve their maximum potential during the vegetative phase.

### Key Benefits



**Robust Root Development:** Veg WS NPK promotes healthy root growth, allowing plants to absorb more nutrients and water from the soil.



**Nutrient Uptake:** The chelated nutrients (e.g., EDTA, DTPA, EDDHA) in Veg WS NPK ensure that plants can easily absorb the necessary nutrients for healthy growth and development.



**Essential Elements for Growth:** The addition of NPK and chelated micronutrients provides the essential building blocks for vegetative growth.

### Advantages

- ✓ **High Purity:** Made with high-purity ingredients to minimize the risk of introducing unwanted contaminants or impurities to the growing environment.

### Product Characteristics

- Low in heavy metals and sodium.
- Water-soluble granules.



Scan for application rate details and product information.

### Different Applications



Foliar Fertigation



Open Field Fertigation

### Guaranteed Analysis (%w/w)

|  |        |
|--|--------|
| Total Nitrogen (N) .....                                   | 4.0%   |
| 4% Nitrate Nitrogen .....                                  |        |
| Available Phosphate (P <sub>2</sub> O <sub>5</sub> ) ..... | 7.0%   |
| Soluble Potash (K <sub>2</sub> O) .....                    | 25.0%  |
| Magnesium (Mg) .....                                       | 9.0%   |
| Iron (Fe) .....  | 2.6%   |
| Manganese (Mn) .....                                       | 0.07%  |
| Boron (B) .....  | 0.03%  |
| Zinc (Zn) .....  | 0.02%  |
| Copper (Cu) .....  | 0.2%   |
| Sulfur (S) .....   | 11.0%  |
| Molybdenum (Mo) .....                                      | 0.005% |

### Compatibility

Compatible with other fertilizers, except for calcium fertilizers. A separate tank is needed, or fertilizers should be applied at different times. In the case of foliar feeding as part of a mix with crop protection products, a compatibility test must be performed before preparing the spray mix.

### Packaging



10kg



25kg

\*Subject to availability in our warehouse stock.

# Bloom Water-Soluble NPK

## 1-13-29+7 (MgO)+(TE)

Bloom WS NPK is a precision-engineered formula that maximizes flowering potential through an optimized nutrient profile.

The specialized 1-13-29 ratio drives powerful bloom production, enhanced essential oil development, and superior flower quality. Phosphorus and potassium ensure robust flower formation while promoting strength and stress resilience during the critical flowering phase.

### Key Benefits



**Maximized Flowering Potential:** Optimized NPK ratio and readily available phosphorus and potassium to promote abundant flower formation and development.

**Enhanced Essential Oil Production:** Specific nutrients and micronutrients support the biosynthesis of essential oils, which contribute to the aroma and flavor of flowers and fruits.

**Advanced Chelation:** Utilizes advanced chelating agents (e.g., EDTA, DTPA, EDDHA) to bind micronutrients, protecting them from becoming unavailable due to reactions with other elements in the solution.

### Advantages

- ✓ **High Purity:** Made with high-purity ingredients to minimize the risk of introducing unwanted contaminants or impurities to the growing environment.

### Product Characteristics

- Low in heavy metals and sodium.
- Water-soluble granule blend.



Scan for application rate details and product information.

### Different Applications



Foliar Fertigation



Open Field Fertigation

### Guaranteed Analysis (%w/w)

|  |        |
|--|--------|
| Total Nitrogen (N) .....                                   | 1.0%   |
| 1% Nitrate Nitrogen  |        |
| Available Phosphate (P <sub>2</sub> O <sub>5</sub> ) ..... | 13.0%  |
| Soluble Potash (K <sub>2</sub> O) .....                    | 29.0%  |
| Magnesium (Mg) .....                                       | 7.0%   |
| Iron (Fe) .....  | 2.6%   |
| Manganese (Mn) .....                                       | 0.07%  |
| Boron (B) .....  | 0.03%  |
| Zinc (Zn) .....  | 0.02%  |
| Copper (Cu) .....  | 0.2%   |
| Sulfur (S) .....   | 13.0%  |
| Molybdenum (Mo) .....                                      | 0.005% |

### Compatibility

Compatible with other fertilizers, except for calcium fertilizers. A separate tank is needed, or fertilizers should be applied at different times. In the case of foliar feeding as part of a mix with crop protection products, a compatibility test must be performed before preparing the spray mix.

### Packaging



\*Subject to availability in our warehouse stock.

# Calcium Drive

## Calcium Optimization

Comprehensive approach to optimizing calcium for plants. Traditional calcium sources like calcium nitrate, cal-mag nitrate, and calcium chloride are beneficial but pose substantial challenges.

When calcium and nitrate are combined, it complicates nutrient ratio adjustments, leading to potential  $\text{NO}_3/\text{NH}_4$  imbalances. Additionally, there's the risk of chloride toxicity, as evident in conditions like chlorosis when using calcium chloride. Through our advanced amino acid complex technology, Calcium Drive ensures efficient calcium uptake without the complications of excess.

### Key Benefits

-  Free of  $\text{NO}_3/\text{NH}_4$ , sulfur, and chloride: Safely elevate calcium levels, avoiding the risks of nitrate imbalance and chloride toxicity.
-  Advanced Technology: Unique calcium with amino acid complex for superior nutrient delivery.
-  Versatility in Application: Designed for rapid calcium absorption for all stages of growth.
-  Water-Soluble: Perfectly suited for dosing and injection systems, as well as drip irrigation setups.

### Advantages

- Calcium Drive allows plants to adeptly assimilate and utilize larger volumes of essential nutrients during pivotal growth phases, resulting in accelerated growth, increased vitality, and deeper genetic expression.

### Product Characteristics

- Liquid amino-encapsulated calcium.



### Different Applications



### Guaranteed Analysis (%w/w)

Active Ingredients:  
Calcium with amino acid complex ..... 12.0%

### Compatibility

Compatible with inorganic and organic fertilizers.

### Packaging



\*Subject to availability in our warehouse stock.

# Potassium Drive

## Specialized Bioavailable Potassium

Potassium is fundamental for plants, playing a pivotal role in fruit and flower production. Ensuring optimal potassium levels can be challenging with traditional methods. Using sources like SOP (potassium sulfate), potassium chloride, and MAP (monoammonium phosphate) presents limitations, as the added elements can complicate ratios.

Potassium Drive represents an innovative approach to potassium nutrition, utilizing advanced amino acid complex technology that sets a new standard in nutrient delivery.

Potassium Drive delivers a concentrated liquid form of potassium with an amino acid complex that is readily available for plant uptake. This optimized delivery system ensures your plants are getting the best chance for optimal yields and quality. Potassium Drive is chloride-free.

### Key Benefits



**Enhanced Delivery:** Our amino acid complex technology optimizes potassium availability to plants.



**Yield Enhancement:** Amplify crop yields with consistent and effective potassium supplementation.



**Improved Brix Levels:** Elevate sugar content in fruits, leading to better taste and quality.



**Enhanced Coloration:** Achieve vibrant colors in fruits and flowers, making them more appealing and market-ready.

### Advantages

- ✓ **Potassium Optimization:** Driving your plant to optimum potassium levels may lead to improved yields, better coloration, and higher Brix levels.
- ✓ **Bioavailability Enhancement:** Our exclusive amino acid complex technology ensures plants receive potassium in its most effective and absorbable state.

### Product Characteristics

- Liquid amino-encapsulated potassium.



### Different Applications



Indoor  
Cultivation



Outdoor  
Cultivation



Greenhouse  
Cultivation



Nursery  
Cultivation

### Guaranteed Analysis (%w/w)

#### Active Ingredients:

Potassium with amino acid complex ..... 12.0%

### Compatibility

Compatible with inorganic and organic fertilizers.

### Packaging



1L



5L



10L



20L



208L



1000L

\*Subject to availability in our warehouse stock.

# Phosphorus Drive

## With Amino Acid Complex

Phosphorus is a vital component for plant growth, essential for photosynthesis, energy transfer (ATP), and genetic processes (DNA), playing a key role in root development, flowering, and fruit production. Conventional phosphorus sources like monoammonium phosphate (MAP) and monopotassium phosphate (MKP) often introduce unwanted elements, disrupting nutrient balance and binding essential nutrients, which can hinder proper plant development.

Phosphorus Drive, with its advanced amino acid complex technology, delivers a highly efficient phosphorus source. Its concentrated liquid formulation (10% phosphorus with amino acids) ensures immediate absorption and utilization, optimizing plant performance for higher yields and superior quality.

### Key Benefits



Superior Root Development: Promotes strong, healthy root systems that maximize nutrient and water uptake.



Optimized Energy Transfer: Supports critical metabolic processes essential for plant vigor and resilience.



Enhanced Flowering and Fruiting: Stimulates prolific flowering and fruit production for maximized yields.

### Advantages

- ✓ Pure Phosphorus Delivery: Eliminates the complications of traditional sources that introduce unwanted elements.
- ✓ Amino Acid Complex Technology: Ensures phosphorus is delivered in its most bioavailable form.
- ✓ pH Stability: Maintains optimal root zone conditions for consistent nutrient uptake.

### Product Characteristics

- Liquid amino-encapsulated phosphorus.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

#### Active Ingredients:

Phosphorus with amino acid complex ..... 10.0%

### Compatibility

Compatible with inorganic and organic fertilizers.

### Packaging



1L



5L



10L



20L



208L



1000L

\*Subject to availability in our warehouse stock.



# Magnesium Drive

## Pure Magnesium Complex

Magnesium serves as a crucial element in plant development, functioning not only as the central atom in chlorophyll molecules but also as a key activator for over 300 essential enzyme processes.

Sources like Magnesium Sulfate and Magnesium Nitrate can have limitations that impact nutrient management and plant health. Magnesium Drive bypasses undesirable sulfur accumulation and  $\text{NO}_3/\text{NH}_4$  imbalances that can interfere with optimal plant development. Through our advanced amino acid complex technology, Magnesium Drive efficiently delivers magnesium with the benefits of amino acid delivery.

### Key Benefits



- Free of  $\text{NO}_3$  and Sulfate: Optimize magnesium levels without the challenges of nitrogen or sulfur accumulation.
- Advanced Technology: A unique magnesium–amino acid complex ensures superior nutrient delivery and absorption.
- Versatility in Application: Effective throughout the growing cycle, particularly during vegetative growth when chlorophyll production is critical.

### Advantages

- Photosynthesis Enhancement: Magnesium Drive enables plants to maintain optimal chlorophyll levels and enzyme activities, resulting in enhanced photosynthesis and improved metabolic processes.
- Stress Resilience: Plants receiving Magnesium Drive demonstrate deeper green foliage and improved stress tolerance, leading to more efficient nutrient utilization throughout the growing cycle.

### Product Characteristics

- Liquid amino-encapsulated magnesium.



### Different Applications



### Guaranteed Analysis (%w/w)

Active Ingredients:  
Magnesium with amino acid complex ..... 10.0%

### Compatibility

Compatible with inorganic and organic fertilizers.

### Packaging



\*Subject to availability in our warehouse stock.

# Trace Element Defense

## Micronutrients

Trace Element Defense is an advanced liquid micronutrient formula delivering precise chelated nutrients during critical growth phases.

This specialized blend optimizes the PPM ranges of essential micronutrients like iron, copper, zinc, and boron, establishing the foundation for robust plant development.

### Key Benefits



**Enhanced Absorption:** Chelated micronutrients maximize bioavailability, ensuring optimal vegetative growth.

**Enhanced Plant Health:** Supports ideal nutrient levels, allowing plants to better protect themselves against stress.

**Balanced Micronutrient Delivery:** Defense's chelated micronutrients deliver precise ratios of essential elements, ensuring plants receive the right balance for robust root development and vigorous foliar growth.

### Advantages

- ✓ Precise Nutrient Ratios: Specifically designed for improved vigor and overall plant health, promoting a better transition to flower.

### Product Characteristics

- Liquid chelated trace elements.
- Low in sodium.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

|                   |      |
|-------------------|------|
| Iron (Fe) .....   | 1.2% |
| Boron (B) .....   | 0.5% |
| Zinc (Zn) .....   | 0.5% |
| Copper (Cu) ..... | 0.5% |

### Compatibility

Trace Element Defense can be mixed into a concentrated solution with Formula 1 Veg fertilizers. Compatible with all fertilizers, supplements, and pest control products when combined into a ready-to-use batch tank.

### Packaging



1L



5L



10L



20L



208L



1000L

\*Subject to availability in our warehouse stock.



# Trace Element Stack

## Micronutrients

Trace Element Stack is an advanced liquid micronutrient formula for maximum flowering performance.

This precision blend delivers optimal ratios of manganese, iron, copper, zinc, and boron through highly chelated compounds, ensuring superior nutrient absorption during the critical flowering stage. By optimizing cellular function and plant vitality, this specialized formula unlocks your crop's full flowering potential.

### Key Benefits



**Advanced Crop Steering for Flowering:** Delivers precise nutrient ratios and optimal PPM ranges tailored for the flowering phase.

**Enhanced Absorption:** Chelated micronutrients maximize bioavailability, ensuring peak flowering performance.

**Enhanced Plant Health:** Supports ideal nutrient levels, allowing plants to better protect themselves against stress during flowering.

### Advantages

- ✓ **Precise Nutrient Ratios:** Specifically designed for the flowering phase and the plant's transition into ripening, promoting larger blooms and higher yields.

### Product Characteristics

- Liquid chelated trace elements.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

|                      |      |
|----------------------|------|
| Manganese (Mn) ..... | 1.2% |
| Boron (B) .....      | 0.6% |
| Zinc (Zn) .....      | 0.2% |

### Compatibility

Trace Element Stack can be mixed with Formula 1 Bloom concentrate. Compatible with all fertilizers, supplements, and pest control products when combined into a ready-to-use batch tank.

### Packaging



1L



5L



10L



20L



208L



1000L

\*Subject to availability in our warehouse stock.





In addition to fertilizers, our supplements enhance nutrient intake for your cannabis crops, addressing key growth stages like vegetative growth and flowering.

# Super Slick

## Horticulture Wetting Agent

Super Slick is an advanced horticultural surfactant, featuring our specialized encapsulated sulfur formulation enhanced with essential oils and ascorbic acid.

This approach delivers sulfur's natural protective properties while remaining gentle on plants, as the encapsulated form primarily remains on plant surfaces rather than being absorbed into plant tissue. Unlike traditional sulfur applications, this formulation leaves no sulfur residue and dissipates naturally.

100% biodegradable and non-toxic to plants and humans.

### Key Benefits



**Natural Protection:** Encapsulated sulfur provides sulfur's inherent protective properties while being exceptionally plant-friendly..

**Surface-Active Technology:** Formulation maintains activity on surface areas without significant plant tissue absorption, unlike traditional sulfur products.

**Zero Residue:** Dissipates naturally, leaving no sulfur residue on plants or equipment.

**System Maintenance:** Helps prevent biofilm formation in irrigation lines while promoting cleaner spray systems.

### Advantages

- ✓ **Protection Technology:** Advanced encapsulated sulfur technology provides natural plant surface protection.
- ✓ **Formulation Compatibility:** Effectively combines with various fertilizers, biostimulants, and IPM ingredients.
- ✓ **Residue-Free Performance:** No sulfur residue, unlike traditional applications.

### Product Characteristics

- Liquid-encapsulated sulfur.



### Different Applications



### Guaranteed Analysis (%w/w)

#### Active Ingredients:

|                   |       |
|-------------------|-------|
| Sulfonated Canola | 70.0% |
| Oil of Coriander  | 3.0%  |
| Triethanolamine   | 5.0%  |
| Ascorbic acid     | 2.0%  |

#### Inert Ingredients:

|                  |       |
|------------------|-------|
| H <sub>2</sub> O | 20.0% |
|------------------|-------|

### Compatibility

Compatible with all automated fertigation, dosing systems, and hydroponics.

### Packaging



\*Subject to availability in our warehouse stock.



# pH Up

## pH Buffering Solution

pH Up is the ideal product for regulating the pH in all substrates and hydroponic systems. It is used to raise the pH of irrigation water and hydroponic solution when the pH is low (acidic). A balanced pH buffer regulates pH without altering nutrient concentrations or ratios.

Maintaining the correct pH in the root zone is essential for maximizing plant development. pH Up allows the grower to raise the pH when it's below the desired level, avoiding deficiencies in cultivation.

### Key Benefits



Deficiency Prevention: Prevents nutrient deficiencies.

Yield Optimization: Maximizes crop yields.

Absorption Efficiency: Maximizes nutrient absorption rate.

Formula Concentration: Highly concentrated.

### Advantages

- ✓ Nutrient Availability Enhancement: pH Up's ability to maintain an optimal pH range enables plants to absorb essential nutrients more efficiently, reducing the risk of deficiencies and related growth problems.

### Product Characteristics

- Liquid potassium hydroxide.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

Potassium Hydroxide ..... 30.0%

### Compatibility

Compatible with most hydroponic systems (NFT, DWC, drip, etc.). Add pH Up last

### Packaging



1L



5L



10L



20L



208L



1000L

\*Subject to availability in our warehouse stock.





Our biostimulants enhance natural processes in cannabis, improving stress resistance, nutrient absorption, root development, chlorophyll production, and overall plant vigor, leading to superior crop quality and yield.

# Rapid Si

## Silicic Acid with Potassium

Rapid Si with Potassium is engineered at the molecular level to create a formulation that solves silicon's traditional absorption challenges. With a specialized delivery system, we ensure these essential nutrients reach their cellular targets efficiently. The biopolymer encapsulation maintains these elements in their most bioactive form, leading to stronger cell walls, enhanced nutrient transport, and superior plant performance.

### Key Benefits



- Maximum Nutrient Absorption: Enhanced uptake through delivery technology for optimal plant nutrition.
- Enhanced Structural Integrity: Strengthens cell walls and tissues across all plant parts for improved resilience.
- Superior Nutrient Movement: Optimizes nutrient transport and distribution throughout the plant system.
- Optimized Metabolic Efficiency: Improves cellular processes and energy utilization for enhanced plant performance.
- Unmatched Stress Tolerance: Provides exceptional resistance against environmental and physiological stressors.

### Advantages

- ✓ Highest bioavailable silicon concentration in the industry.
- ✓ Advanced potassium-silicon synergy for maximum effectiveness.
- ✓ Sustained release technology ensures continuous nutrient availability.
- ✓ Visible improvements in crop quality and resilience.

### Product Characteristics

- Liquid silica with amino acids.



### Different Applications



### Guaranteed Analysis (%w/w)

|                                    |       |
|------------------------------------|-------|
| Silica (SiO <sub>2</sub> ) .....   | 1.02% |
| Potassium (K <sub>2</sub> O) ..... | 1.42% |

### Compatibility

Compatible with most fertilizers and crop protection products. A compatibility test is recommended before mixing with other products.

### Packaging



\*Subject to availability in our warehouse stock.



# Amplify Clear

## Plant Supplement

Amplify Clear is an all-natural plant supplement formulated to support and enhance root development, nutrient uptake, stress tolerance, and overall plant vigor. Formulated with scientifically proven ingredients designed to maximize plant growth, yield, and quality.

This formulation works synergistically to optimize both vegetative and early flowering stages, ensuring comprehensive development from robust root systems and accelerated growth to enhanced flower production and resilience. Whether cultivating indoors, in greenhouses, or outdoors, you provide the essential support your plants need to thrive. Deliver healthier, more vigorous yields with superior quality and proven ingredients.

### Key Benefits



**Robust Root Development:** Stimulates extensive root growth and branching, ensuring a strong foundation for plant health.

**Accelerated Vegetative Growth:** Boosts photosynthetic efficiency and speeds up vegetative growth, promoting vigorous plant development.

**Enhanced Stress Tolerance:** Protects plants against osmotic stress and maintains cellular water balance, helping them thrive under fluctuating conditions.

**Improved Nutrient Absorption:** Enhances nutrient uptake and maintains healthy cell membranes, ensuring efficient nutrient utilization.

### Advantages

- ✓ **Secondary Metabolite Enhancement:** Beeswax extract has been found to increase the production of secondary metabolites, including terpenes, which are essential for the properties of terpene-rich crops.
- ✓ **Defense Response Activation:** Chitosan's ability to induce stress responses in plants can also lead to increased terpene production as a defense mechanism.

### Product Characteristics

- Liquid biostimulant.



### Different Applications



### Guaranteed Analysis (%w/w)

|                     |       |        |
|---------------------|-------|--------|
| Active Ingredients: | ..... | 5.085% |
| Beeswax             |       |        |
| Chitosan            |       |        |
| Amino Acids         |       |        |
| Bark Extract        |       |        |
| Root Extract        |       |        |
| Lipids              |       |        |
| Vitamin C           |       |        |
| Vitamin B1          |       |        |

|                          |       |         |
|--------------------------|-------|---------|
| Other Ingredients:       | ..... | 94.915% |
| Carriers and Stabilizers |       |         |

### Compatibility

Compatible with all automated dosing systems and hydroponics.

### Packaging



\*Subject to availability in our warehouse stock.





# IPM Root Drench

## Kills Pests and Targets Fungus

IPM Root Drench is composed of essential oils, botanical extracts, beneficial acids, and vitamins. This product is highly water-soluble and mixes in conjunction with most fertilizers and supplements.

We only process raw certified botanicals and herbs in our laboratory. This ensures that all essential oils, plant extracts, and terpenes have a consistent potency across all production batches.

### Key Benefits



Root Zone Protection: Fights pests, fungus, and algae within the root zone.

Harvest Flexibility: Safe to use up to the day of harvest when applied as directed on the label.

Microbiome Preservation: Minimal impact on a substrate's beneficial microbiology.

Localized Action: Non-systemic.

### Certifications



Ingredients permitted under FIFRA 25(b) and applicable CDA guidelines.

### Advantages

- ✓ Root Zone Sanitation: Safely and effectively targets pests and microorganisms in the root zone.

### Product Characteristics

- Liquid essential oil blend.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

Active Ingredients ..... 12.5%

Rosemary Oil  
Corn Oil  
Thyme Oil  
Clove Oil  
Cinnamon Oil  
Citric Acid

Inert Ingredients ..... 87.5%

Glycerin  
Sorbitol  
Polyglycerol Oleate  
Ascorbic Acid  
H<sub>2</sub>O

### Packaging



1L



5L



10L



20L



208L



1000L

\*Subject to availability in our warehouse stock.



# IPM Foliar Spray

## Eliminates Pests on Contact

IPM Foliar Spray implements multiple mechanisms to fight pest and mold infestations. This proprietary formula contains an array of active ingredients designed to coat the exterior of pests and mold, preventing respiration.

IPM Foliar Spray also disrupts the feeding process of pests and compromises their reproductive cycle.

### Key Benefits



Residue-Free Application: Leaves no residue on plants.

Growth Stage Compatibility: Safe to use during vegetative and flowering phases.

Dual-Action Protection: Targets both pests and mold.

Localized Treatment: Non-systemic.

### Certifications



Ingredients permitted under FIFRA 25(b) and applicable CDA guidelines.

### Advantages

- ✓ Growth Stage Safety: Safe to spray on plants during all stages of growth.
- ✓ Natural Formulation: Essential oil formula without harsh chemicals.

### Product Characteristics

- Liquid essential oil blend.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

Active Ingredients ..... 10.5%

Citric Acid  
Peppermint Oil  
Potassium Sorbate  
Rosemary Oil  
Geraniol

Inert Ingredients ..... 89.5%

Ascorbic Acid  
Glycerin  
Silica Hydrate  
Polyglycerol Oleate  
Sorbitol  
H<sub>2</sub>O

### Packaging



1L



5L



10L



20L



208L



1000L

\*Subject to availability in our warehouse stock.





A clean environment is vital for successful cannabis cultivation. Our sanitizers keep your systems pathogen-free, promoting plant health and higher yields.

## Huwa-San TR-50

### Multipurpose Disinfection

Huwa-San TR-50 is a biodegradable disinfectant that meets the highest disinfection standards for bactericides, fungicides, and virucides. This powerful and high-quality disinfectant is stable and broadly applicable.

Huwa-San TR-50 is the most advanced nanocolloidal-stabilized hydrogen peroxide. This active substance is a very strong oxidizer that, after disinfection, breaks down into oxygen and water, leaving no harmful residues.

#### Key Benefits



Hydrologic Purification: Advanced water hygiene.

Biofilm Dissolution: Biofilm removal.

Residue-Free Treatment: No harmful residues.

Direct Sanitization: No-rinse surface disinfection.

Oxygen Enhancement: Oxygen-rich water.

Formula Longevity: Superior stability.

#### Advantages

- ✓ Pathogen Containment: Prevents the spread of pathogens.
- ✓ Environmental Degradation: Biodegradable, splits into water and oxygen.
- ✓ Plant-Safe Formula: Free of chlorine and alcohol.
- ✓ Sustained System Protection: Long-lasting and controlled effect on the irrigation system.

#### Product Characteristics

- Hydrogen peroxide (49.9%) stabilized with nanocolloidal particles.



#### Different Applications



#### Guaranteed Analysis (%w/w)

Hydrogen Peroxide ..... 49.9%

#### Compatibility

Huwa-San TR-50 can be added to nutrient batch tanks when diluted to 1-5 mL/gal. When applying at higher concentrations, always add it alone.

#### Packaging



\*Subject to availability in our warehouse stock.

# Eco Foam Cleaner

## Advanced Cleaning

Eco Foam Cleaner is a unique biodegradable foam cleaner that meets ecological standards for cleaning in horticultural environments. This powerful and eco-friendly cleaner is stable and readily applicable for all growing surfaces.

It is an innovative alkaline foam cleaner. Through advanced formulation, Eco Foam Cleaner exhibits perfect adhesion properties while being environmentally responsible. The product's active foam technology ensures optimal cleaning performance with 1-3% dilution rates.

### Key Benefits



- Foam Activation: Active foam technology.
- Surface Adherence: Superior adhesion properties.
- Oxygenated Cleansing: Oxygen-enriched cleaning.
- Effortless Removal: Easy rinse-off.
- Residue-Free Results: No residue after rinsing.

### Advantages

- ✓ Organic Waste Elimination: Removes organic debris and plant matter.
- ✓ Persistent Foam Action: Superior foam stability and duration.
- ✓ Environmental Compatibility: Biodegradable and sustainable.
- ✓ Multi-Surface Efficacy: Effective on multiple surface types.

### Product Characteristics

- Liquid foaming cleaner/disinfectant.



### Different Applications



### Guaranteed Analysis (%w/w)

Active Foam Content ..... 3.0%

### Compatibility

Suitable for all surfaces, including:

- Glass
- Plastic
- Metal
- Concrete
- Growing equipment
- Irrigation systems

### Packaging



\*Subject to availability in our warehouse stock.





Formula 1 Organics' advanced biological technology delivers professional-grade microbial solutions that maximize plant growth. Our proprietary formulations utilize specialized beneficial microorganisms.

# Root Maxx - Root Drive

## Clones and Seedlings

Root Maxx Root Drive is a specialized mycorrhizal fungi powder formulation that accelerates root development in cuttings and seedlings.

This professional-grade powder creates powerful symbiotic relationships between beneficial fungi and developing roots, establishing the foundation for exceptional plant growth.

### Key Benefits



Rapid Establishment: Visible root development within 7-10 days.

Propagation Success: Significantly higher rooting success rates.

Transition Protection: Reduced transplant shock.

Nutritional Efficiency: Enhanced nutrient uptake.

### Application

1. Dip cuttings in powder prior to transplanting.
2. Plant immediately in rooting medium.
3. Use prior to transplanting for cloning, veg, and flower.

\*Application establishes a permanent beneficial relationship.

### Advantages

- ✓ Propagation Enhancement: Ideal for vigorous root development during propagation.

### Product Characteristics

- Water-soluble beneficial bacteria/inoculant.



### Different Applications



### Guaranteed Analysis (%w/w)

#### Active Ingredients:

Rhizobius intraradices ..... 2.0%  
(245 active spores/gram)

Inert Ingredients (Carrier) ..... 98.0%

### Compatibility

Works with soil and peat moss, coco coir and stone wool. Avoid fungicides and disinfectants for 4-6 weeks after application to not negatively impact beneficial microbial growth.

### Packaging



\*Subject to availability in our warehouse stock.

# Ignite - Organic Accelerator

## Biological Root Enhancement

Ignite Organic Accelerator enhances root development using advanced microbial technology in a professional-grade formula.

This advanced system harnesses the power of sixteen specifically selected beneficial microorganisms, including specialized mycorrhizal fungi and Trichoderma strains, to create an unprecedented boost in root development and plant vitality.

### Key Benefits



- Enhanced Root Development: Our advanced formula promotes explosive root growth through multiple mechanisms.
- Nutrient Optimization: Specialized microbial complex maximizes nutrient availability.
- Biological Defense Shield: Our unique formulation provides comprehensive protection against common root pathogens.

### Application

1. Direct Soil Application.
2. Transplant Treatment.
3. Propagation Enhancement.
4. Hydroponic System Integration.
5. Root Dip Solution.

### Advantages

- ✓ Growth Acceleration: Promotes faster root establishment and overall plant vitality.

### Product Characteristics

- Ultra-fine water-soluble powder, rapid dissolution in water.



### Different Applications



### Guaranteed Analysis (%w/w)

|   |     |
|---|-----|
| Beneficial Microorganisms .....             | 4%  |
| Mycorrhizal Fungi Complex                   |     |
| Trichoderma Harzianum                       |     |
| Phosphorus-Solubilizing Bacteria            |     |
| Nitrogen-Fixing Bacteria                    |     |
| Beneficial Rhizosphere Bacteria             |     |
| Inert Ingredients .....                     | 96% |
| Carriers and stabilizers                    |     |
| Minimum viable count: $1 \times 10^8$ CFU/g |     |

### Compatibility

Works with soil and peat moss, coco coir and stone wool. Avoid fungicides and disinfectants for 4-6 weeks after application to not negatively impact beneficial microbial growth.

### Packaging



\*Subject to availability in our warehouse stock.



# Drive - Organic Veg Nutri Boost

## Beneficial Microbes

Drive Organic Veg Nutri Boost is a concentrated, water-soluble formula with sixteen carefully selected beneficial microorganisms that create an unprecedented synergy in your growing environment. It enhances nutrient availability and promotes vigorous plant development through a sophisticated microbial ecosystem.

Our proprietary preservation technology ensures optimal viability of beneficial organisms, allowing them to start working immediately upon application.

### Key Benefits



Phosphorus Mobilization: Improved phosphorus solubilization.



Nitrogen Acquisition: Enhanced nitrogen fixation.



Root Zone Expansion: Expanded root surface area.



Structural Reinforcement: Strengthened root structure.

### Application

1. Initial: Week 4 of vegetation.
2. Duration: Continue through flowering stage.
3. Integration: Compatible with most nutrient programs.

### Advantages

- ✓ Microbial Concentration: Highly concentrated formula with up to 50 times more active beneficial microbes than conventional microbial products.

### Product Characteristics

- Ultra-fine water-soluble powder, rapid dissolution in water.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

|   |     |
|---|-----|
| Active Ingredients .....                        | 4%  |
| Multi-strain probiotic complex with mycorrhizae |     |
| Inert Ingredients .....                         | 96% |
| Carriers and stabilizers                        |     |
| Minimum viable count: $1 \times 10^8$ CFU/g     |     |

### Compatibility

Works with soil and peat moss, coco coir and stone wool. Avoid fungicides and disinfectants for 4-6 weeks after application to not negatively impact beneficial microbial growth.

### Packaging



500 g



1000 g



5kg



10kg

\*Subject to availability in our warehouse stock.



# Shift - Organic Bloom Nutri Boost

## Beneficial Microbes

Shift - Organic Bloom Nutri Boost is a specialized biological nutrient balancing technology, combining potassium-solubilizing and nitrogen reduction mechanisms in a professional-grade formulation. This advanced system uses specifically selected beneficial bacteria to optimize nutrient ratios for flowering success.

Our proprietary preservation technology ensures these beneficial organisms remain viable and ready to colonize your growing medium immediately upon application. Within 24-48 hours of application, plants experience optimized nutrient conditions for enhanced flowering performance.

### Key Benefits



Rapid Establishment: Immediate colonization upon application.



Storage Longevity: Extended shelf stability.

### Application

1. Initial: Pre-flowering transition.
2. Duration: Throughout flowering stage.
3. Integration: Compatible with most nutrient programs.

### Advantages

- ✓ Solution Integration: Ultra-fine water-soluble powder, rapid dissolution in water.
- ✓ Microbial Potency: Highly concentrated formula with 4% active beneficial microbes, providing superior denitrification and potassium solubilization.
- ✓ Bloom Transition Support: Specialized strains for optimal flowering transition.
- ✓ Formula Durability: Professional-grade formulation for maximum stability.

### Product Characteristics

- Ultra-fine water-soluble powder, rapid dissolution in water.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

|   |       |
|---|-------|
| Active Ingredients .....                    | 3%    |
| Beneficial Rhizosphere Complex              |       |
| Inert Ingredients .....                     | 97.0% |
| Carriers and stabilizers                    |       |
| Minimum viable count: $1 \times 10^8$ CFU/g |       |

### Compatibility

Works with soil and peat moss, coco coir and stone wool. Avoid fungicides and disinfectants for 4-6 weeks after application to not negatively impact beneficial microbial growth.

### Packaging



500 g



1000 g



5kg



10kg

\*Subject to availability in our warehouse stock.



# Fuel - Organic Bioenergizer

## Microbial Booster

Fuel Organic Bioenergizer boosts beneficial microorganisms organically: a blend of freeze-dried molasses and premium filtered humic powder.

This professional-grade formula provides your root zone with the levels of sugar and carbon compounds that beneficial microbes need to thrive.

### Key Benefits



Microbiome Enhancement: Enhances microbial vitality.

Sustained Energy Provision: Provides immediate and sustained energy sources.

Rhizosphere Optimization: Optimizes root zone nutrition.

Growth Foundation: Improves plant growth foundation.

### Application

1. Direct Soil Application: Mix 2–5 g/gal of water, apply during watering.
2. Hydroponic Systems: Dissolve 2 g/gal in reservoir.
3. Maintenance Feeding: Apply weekly throughout growth cycle.
4. Pre-planting Soil Prep: Mix directly into growing medium at 5g per cubic foot.
5. Transplant Boost: Water in at 5 g/gal at transplant.

### Advantages

- ✓ Microbial Facilitation: Supports microbial activity for optimal plant performance.

### Product Characteristics

- Ultra-fine water-soluble powder, rapid dissolution in water.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

Active ingredients derived from molasses and compost:

Sugar Cane Molasses  
Organic Carbon  
Plant Matter

### Compatibility

Works with soil and peat moss, coco coir and stone wool. Avoid fungicides and disinfectants for 4-6 weeks after application to not negatively impact beneficial microbial growth.

### Packaging



500 g



1000 g



5kg



10kg

\*Subject to availability in our warehouse stock.



# Troop Maxx

## Bioinsecticide

Troop Maxx harnesses advanced biological technology with specialized beneficial microorganisms selected specifically for professional agriculture. The proprietary formulation features carefully isolated strains that deliver superior field performance.

This premium solution employs sophisticated formulation science to optimize microbial viability and colonization efficiency. The advanced carrier system ensures microbial stability and cellular integrity throughout the product lifecycle.

Operating through multiple biological mechanisms, Troop Maxx enhances nutrient cycling and strengthens plant resilience. Extensive testing confirms consistent performance across diverse horticultural systems, providing reliable results for professional growers seeking biological solutions.

### Key Benefits



Defense Mechanism Enhancement: Optimizes biological control mechanisms.

Delivery Innovation: Advanced carrier system technology.

Professional Formulation: Professional-grade biological formulation.

Agricultural Safety: Safe for use in agricultural production.

### Advantages

- ✓ Biological Establishment: Rapid deployment and colonization.
- ✓ Microbial Performance: Enhanced biological activity.
- ✓ IPM Compatibility: Compatible with non-chemical programs.
- ✓ Application Safety: Safe throughout growing cycle.

IPM

### Product Characteristics

- Laboratory-grade powder – biological consortium.



### Different Applications



Indoor Cultivation



Outdoor Cultivation



Greenhouse Cultivation



Nursery Cultivation

### Guaranteed Analysis (%w/w)

#### Active Ingredients:

|                                   |       |
|-----------------------------------|-------|
| Verticillium lecanii .....        | 2.0%  |
| Professional Carrier System ..... | 88.0% |
| Biological Co-factors .....       | 6.0%  |
| Stabilizing Agents .....          | 4.0%  |

### Compatibility

Works with soil and peat moss, coco coir and stone wool. Avoid fungicides and disinfectants for 4-6 weeks after application to not negatively impact beneficial microbial growth.

### Packaging



500 g



1000 g



5kg



10kg

\*Subject to availability in our warehouse stock.





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