

ABOUT

Performance Nutrition® is committed to delivering innovative, high-performance solutions tailored for the Agriculture market. Our comprehensive product portfolio includes Pest & Disease Control Products, Biostimulants, Nutritional Blends, Plant Growth Regulators, and Polymer Adjuvants, all designed to enhance crop health, maximize nutrient efficiency, and improve overall yield potential. Each formulation is carefully developed to support growers in achieving consistent, high-quality results across diverse growing environments.

Dedication to continuous innovation remains the focus of Performance Nutrition. Our team of agronomic specialists and product development experts work relentlessly to create advanced solutions that address the evolving challenges of modern farming. Whether it's enhancing nutrient uptake, improving soil health, or increasing crop resilience, our technologies are designed to deliver measurable results with every application.

We are proud to partner with a trusted network of independent distributors across the country, ensuring that growers receive personalized, region-specific expertise to maximize the effectiveness of our solutions. Together, we empower growers with the tools, knowledge, and technology they need to drive productivity, optimize resources, and thrive in an ever-changing agricultural landscape.

PERFORMANCE NUTRITION Agriculture Sales Managers

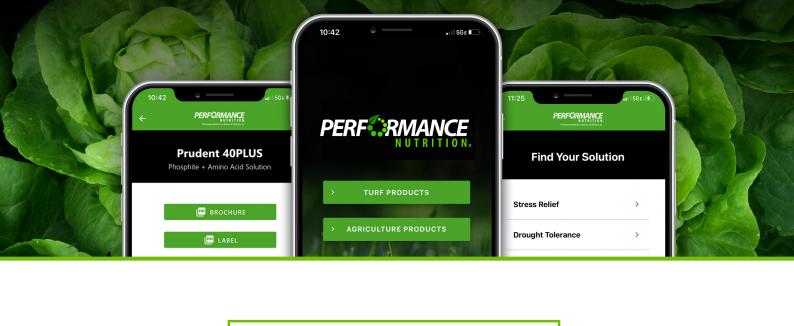
John Flynn

Agricultural Director
Agricultural Products
(941) 232-6704
john@pnfertilizers.com

Corporate Office

LidoChem, Inc 20 Village Court · Hazlet, New Jersey 07730 Phone: (732) 888-8000 · Fax: (732) 264-2751 info@pnfertilizers.com

DOWNLOAD THE PN MOBILE APP





FIND PRODUCTS FIND SOLUTIONS



BIOSTIMULANTS

Amino Acids	
Pennamin [®]	5
Plant Extracts & Blends	
Pronyx™ KelpPlus	6
Kelpene®	7
Humic & Fulvic Acids	
ExAlt®	8
Spectra TM	9
Korban®	10, 1
Soil Inoculants	
NutriWise [®]	12
RemeD8™	13
PLANT NUTRITION	
Foliar & Nutritional Blends	
Suprex [™] K29	14
Vibrant® Water Soluble Fertilizers	
Vibrant® Fischen	
Vibrant® XtraKt	16
Micronutrients	
Krystal Klear®	17, 18
Vergence™	19
Phosphite Fertilizers	
Prudent® AG	20
Fertilizer Additives	
Embella™	2 [.]
PLANT GROWTH REGULATORS	
Agra-Rouse®	22
Incite [®]	22
DOLVMED ADJUMANTS	
POLYMER ADJUVANTS	
Argosy®	23
PEST & DISEASE CONTROL	
PEST & DISEASE CONTROL	
NI t m = I®	2.4



FREE L-AMINO ACID SOLUTION

THE PENNAMIN DIFFERENCE

Amino acids are the essential building blocks of plant health and growth, playing a key role in vital physiological processes. However, plants can only absorb amino acids in their free form, not when bound in peptides or proteins. **Pennamin® Driver-L** is uniquely formulated with a high concentration of free-form L-Amino Acids—the only form readily utilized by plants. This advanced formulation delivers rapid nutrient absorption, ensuring efficient plant nutrition to promote stronger, healthier, and more resilient growth.

GUARANTEED ANALYSIS

Total Nitrogen (N)......7 .0%
7.0% Other Water Soluble Nitrogen

Derived from amino acids

AMINO ACID PROFILE					
Amino Acid	Total AA %	Free AA %	Amino Acid	Total AA %	Free AA %
Alanine	2.49%	2.49%	Methionine	0.30%	0.30%
Arginine	3.39%	3.09%	Phenylalanine	2.39%	2.39%
Aspartic Acid	3.99%	3.59%	Proline	5.49%	5.49%
Cystine	1.10%	0.80%	Serine	6.48%	6.48%
Glutamic Acid	5.59%	5.39%	Threonine	2.49%	2.49%
Glycine	4.19%	4.09%	Tyrosine	0.50%	0.30%
Histidine	0.40%	0.30%	Valine	4.19%	2.89%
Isoleucine	2.49%	1.80%	Total Amino Ad	eid %:	50.4%
Leucine	3.79%	3.69%	FREE Amino Ad	eid %:	46.5%
Lysine	1.00%	0.90%	N from Amino	Acids:	6.90%

WHY CHOOSE PENNAMIN DRIVER-L?

Unmatched Free Amino Acid Content:

High concentration of free L-Amino Acids for rapid plant uptake and maximum efficiency.

Accelerated Nutrient Absorption

Enhances foliar uptake for faster nutrient delivery

Enhanced Stress Tolerance

Increases drought and heat resistance while mitigating salt stress.

Stronger, Healthier Plants

Improves plant turgidity and helps protect against heavy metal toxicity.

Optimized Flowering & Fruit Development

Stimulates flowering, enhances pollination, and improves fruit set.

Boosted Plant Defense Mechanisms

Strengthens natural defenses against pests and pathogens.

Easy Application & Compatibility

Liquid formulation designed for seamless foliar or fertigation application.

Application Instructions

Pennamin® Driver L can be incorporated into liquid fertilizers or applied separately. Soil applications may be made either by sprinkler or band application.

Apply 0.25 to 1.25 gallons of Pennamin Driver L per acre Timing of foliar sprays: Apply every 14 to 28 days as needed.



FERTILIZER SOLUTION w/ Sea Kelp & Amino Acids

ABOUT

Pronyx™ KelpPlus is a concentrated liquid fertilizer containing sea kelp with the added benefits of Pennamin Driver-L amino acids, which support nutrient uptake, plant metabolism, and stress tolerance. This unique formulation provides naturally occurring growth promoters, helping to enhance root development, vigor, and overall plant health.

GUARANTEED ANALYSIS

Total Nitrogen (N)	1.0%
1.0% Water Soluble Nitrogen	
Available Phosphate (P ₂ O ₅)	.0%
Soluble Potash (K ₂ O)	.0%
Derived from kelp and amino acids.	

AMINO ACID PROFILE			
Amino Acid	Content	Amino Acid	Content
Alanine	0.22%	Histidine	0.03%
Arginine	0.30%	Isoleucine	0.22%
Aspartic Acid	0.33%	Leucine	0.35%
Cystine	0.01%	Lysine	0.09%
Glutamic Acid	0.50%	Phenylalanine	0.22%
Glycine	0.37%	Methionine	0.03%
Proline	0.49%	Tyrosine	0.04%
Serine	0.57%	Valine	0.37%
Threonine	0.22%	Total Amino Acids	4.4%

BENEFITS

- Provides a nutritional supplement through the release of naturally occurring plant nutrients and trace minerals.
- Accelerates and improves seed germination
- Promotes vigorous rooting and overall plant health

THE ADVANTAGE

Pennamin Driver-L Amino Acids - 100% of these amino acids are free amino acids so they are quickly available to the plant

Amino acids can complex micronutrients tied up in the soil, making them available for plant uptake

Vitamins - play important roles in plant health and growth, nutrient transport systems in cold temperatures and root regeneration. A, B, B1, B12, C, E, K and PP

Naturally Occurring Growth Promoters Found In Kelp - Promote the synthesis of Gibberellins, Auxins, Cytokinins, Glycol kinetin, Betaines and Carotene

Application Instructions

Apply only as directed. Pronyx KelpPlus is recommended for soil or foliar application. For optimal results dilute one gallon in at least 100 gallons of water. Pronyx KelpPlus can be mixed with most soluble fertilizers, herbicides, insecticides and fungicides.

Agricultural/Horticultural

Apply 1 to 2 quarts per acre every 2 weeks throughout the growing season.



PLANT EXTRACT SOLUTIONS

ABOUT

Kelpene® products are a blend of sea kelp extracts, and, plant extracts, primarily terpenes, derived via a unique proprietary extraction process. Kelpene plant extracts are derived from plants that thrive in diverse environments.

BENEFITS

- Establish environmental adaptability
- Improve stress management
- Increase plant resilience
- Higher yields
- Increase root mass and root tips
- Improve nutrient uptake
- Enhance tissue responsiveness
- Elevate Nutrient Use Efficiency
- Enable better allocation of plant energy
- Nourish plants and soil with organic carbon
- Fortify plants with naturally-occurring phyto-hormones
- Improve uptake of calcium

Kelpene® applications have been shown to support plant health, improve nutrient uptake and encourage robust root development.

Plants become more resilient and adaptive during periods of environmental stress, such as high heat, intense sunlight, shade, un-expected cold, drought, salinity, anaerobic conditions and water stress, etc.

GUARANTEED ANALYSIS

NON PLANT FOOD INGREDIENTS	
Derived from monopotassium phosphate and kelp.	
Soluble Potash (K ₂ O)2.	0%
Available P1105p11ate (P_2O_5)	J /0

Plant extracts......3.5%

Application Instructions

Available Dhosphate (D.O.)

Field Crops:

Soil apply 10 ounces Kelpene CSW per acre in-furrow. Foliar apply 5-10 ounces per acre as soon as possible after emergence and then again in 30-45 days.

Produce (Single Harvest):

Apply 7-14 ounces of Kelpene GPX per acre to transplant water. Make 3-5 foliar applications of 7-10 ounces per acre every 2-3 weeks starting within 2 weeks of transplant or emergence.

Produce (Multiple Harvest):

Apply 7–14 ounces of Kelpene GPX per acre to transplant water. Make 3–8 foliar applications of 14 ounces per acre every 2–3 weeks, starting within 2 weeks of transplant or emergence.

Leafy Greens:

Apply 7 – 14 ounces of Kelpene GPX per acre to transplant water. Make 3-5 foliar applications at 10 ounces per acre every 2-3 weeks starting within 2 weeks of transplant or emergence. Do NOT apply after mid-season.

Fruit Trees and Bush Crops: Foliar apply 10 – 15 ounces of Kelpene GPX 3-5 times per season, beginning just before or right after bloom, and follow up with 1-2 early season applications, 1-2 mid-season applications and 1 late season application.



7 00/





CONCENTRATED SOIL SURFACTANT

ABOUT

ExAlt® is a concentrated soil surfactant that improves the availability of nutrients in the soil and enhances the performance of fertilizer applications. ExAlt corrects compacted soils and eliminates soil "crusting", making it easier for newly germinated seeds to pop through the soil. ExAlt flushes sodium from the soil profile while keeping needed micronutrients in the root zone. ExAlt provides a natural, eco-safe solution for the long-term health of the soil.

For General Maintenance:

ExAlt may be used in maintenance applications to improve nutrient uptake, correct mineral build up, improve drainage, reduce black layer and stimulate plant growth.

For Curative Application:

For the treatment and rejuvenation of highly compacted soils, salt-contaminated soils, damaged soils affected by hydrophobicity and to aid in the recovery of soil damaged by soil borne pathogens.

As a Rescue Application:

ExAlt remediates flood-stressed or over-fertilized areas, treats and rejuvenates compacted soils, detoxifies salt-contaminated soils, and remediates soils impacted by poor water quality.

BENEFITS

- Solubilizes and releases soil-bound ions, such as calcium, magnesium, iron, manganese, phosphorus and sulfur
- Flushes sodium from the root zone without indiscriminately stripping the soil of nutrients
- Improves soil drainage
- Stimulates deeper root systems
- Reduces crusting and penetrates hard pan
- Reduces soil compaction
- Increases soil aggregation
- Improves efficiency of fertilizers and other chemicals
- Improves soil aeration

Application Instructions

Apply ExAlt at a rate of 4-16 fluid oz. per acre at planting and then every two weeks throughout the growing season.

Do Not Mix With Selective Herbicides when used at a rate higher than 4 oz./acre.

GUARANTEED ANALYSIS

Active Ingredients

Humic Acids	35%
Water	65%



CONCENTRATED FULVIC ACID SOLUTION

ABOUT

Spectra™ is a highly concentrated fulvic acid solution that improves the foliar uptake of nutrients and micronutrients and can improve fertilizer performance when added to starter or foliar fertilizer applications.

NON-PLANT FOOD INGREDIENTS

Fulvic Acid	20%
Other Ingredients	80%
Total	100%

Application Instructions

- Spectra may be blended with any compatible fertilizers and foliar sprays applied to all row crops, field crops, forage crops, feed crops, vegetable crops, trees, nut trees, vines.
- Spectra can be foliar-applied at up to 12 ounces per acre per application.
- $\cdot\;$ Apply at least 2 oz. per acre in all foliar applications.

Applications with Herbicides:

- Spectra may be applied at rates of 2 12 ounces per acre with non-selective herbicides.
- Spectra may increase the absorption and efficacy of herbicides.
- Spectra is NOT recommended for use with pre emergence herbicides
- · Spectra is NOT recommended for use with selective herbicides.

BENEFITS

INCREASES NUTRIENT ABSORPTION

Makes nutrients more absorbable by complexing them into organic, ionic forms that are easily transported through cell membranes

IMPROVES FERTILIZER EFFICIENCY

Increases plant uptake of soil and foliar applied nutrients. The low molecular weight formulation improves mobility through cell walls to plant growth points

IMPROVES TANK MIX COMPATIBILITY

Spectra is compatible with foliar applications of non-selective herbicides, fungicides, insecticides and other pesticides. In fact, it provides tank mix compatibility of fertilizer/pesticide combinations.

DETOXIFIES POLLUTANTS

Fulvic acid is vital in helping form new species of metal ions, binding with organic pollutants such as pesticides and herbicides, and catalyzing the breakdown of toxic pollutants.

HELPS TRANSPORT NUTRIENTS

Spectra also plays a role in helping transport nutrients into plant foliage and roots. The highly active low-molecular weight formulation improves mobility of solution through cell walls to plant growth points. This results in a more productive and impactful application.





ABOUT

Korban®-Zn Liquid Humate (0-0-4+2S with 2% chelated Zn) is formulated with PERFORMANCE Organic Acids™, a proprietary blend of humic acids sourced from Leonardite. Extracted using a specialized separation process, these organic acids enhance performance in both soil and plants. The zinc is chelated with Krystal Klear® patented dual-chelation technology, ensuring efficient uptake in soil and foliar applications.

Korban-Zn provides growers with a sustainable solution for improving plant nutrition and soil health by enhancing nutrient uptake, extending phosphorus availability, and supporting soil microbes.

Application Instructions

Korban-Zn is compatible with fertilizer applications, including in-furrow starters and phosphate or micronutrient blends. It can be applied to a wide range of crops via soil, fertigation, or foliar methods..

Soil Applications: Apply pre-plant, as a starter, side dressed, fertigated, top dressed or as a banded application. It should be diluted with water to ensure uniform distribution at a rate of 2 quarts to 3 gallons per acre.

Fertigation Applications: Apply at a rate of 2 quarts to 8 gallons per acre per irrigation. Run irrigation for a minimum of 2 hours after application to flush lines and ensure nutrient distribution.

Foliar Applications: Apply at a rate of 2 quarts to 3 gallons per acre in enough water to provide adequate coverage. Multiple applications may be beneficial.

BENEFITS

- Enhances nutrient solubility, availability, and plant uptake
- Improves cation exchange in soil solutions
- Supports populations of beneficial soil bacterial and fungi
- Protects phosphate fertilizers from binding up into unavailable soil minerals
- Provides potassium, sulfur and zinc
- Promotes a sustainable approach to soil health by supplying organic carbon
- Combines readily with most liquid fertilizers, which can help reduce fertilizer-induced foliar and/or root burn
- Safe for use in seed treatments, in-furrow and foliar field applications
- Blends with most solutions, including those with a high ionic load, even in solutions as low as pH 3.2

GUARANTEED ANALYSIS

Soluble Potash (K ₂ O)	4%
Sulfur (S)	2%
Zinc (S)	2%
Derived from elemental sulfur and notassium hydrovide	

Active Ingredients

	9	
Humic	acids	20%

Derived from leonardite.



CONCENTRATED HUMIC ACID SOLUTION

ABOUT

Korban®-SC Liquid Humate (0-0-4+2S) is formulated with PERFORMANCE Organic Acids™, a blend of a wide range of humic acids that are sourced from Leonardite. Derived using a proprietary extraction and separation process, these natural organic acids are selected for their ability to perform in both the soil and the plant. This extraction and stabilization process yields a high carbon (greater than 7%) humic acid solution that remains soluble over a wide pH range and in solutions with a high ionic load with other nutrients. In addition, Korban-SC Liquid Humate can be used as a recovery tool where plants have been stressed from soil imbalances, including residual herbicide buildup.

Application Instructions

Korban-SC Liquid Humate can be used with any liquid fertilizer application with a pH of 3.2 or higher. It blends well with both Ortho and Polyphosphates, micronutrient solutions, and any commonly used NPK fertilizers.

Soil Applications:

Korban-SC Liquid Humate may be applied with any typical broadcast spray or mixed with deep root injection solutions at a rate of 2 - 4 quarts per 10 gallons solution.

Fertigation Applications:

Korban-SC Liquid Humate may be blended into fertigation solutions to provide 2 - 4 quarts per acre up to twice monthly.

Foliar Applications:

Korban-SC Liquid Humate may be applied at a rate of 0.5 - 2 gallons per acre monthly or 1 to 3 times at random intervals during the growing season.

BENEFITS

- Promotes a sustainable approach to soil health by supplying organic carbon
- Protects phosphate fertilizers from binding up into unavailable soil minerals
- Provides a readily available source of potassium
- Aids in nitrogen efficiency and retention in the soil
- Enhances solubility, availability, and plant uptake of important ions
- Supports populations of beneficial soil bacteria and fungi, improving soil microbiome balance
- Combines readily with most liquid fertilizers, reducing fertilizer-induced foliar and/or root burn
- Safe for use in all applications, from established plants to new plantings and over-seeding
- Will not precipitate in tank mixes or plug screens/ spray nozzles, ensuring smooth field applications

GUARANTEED ANALYSIS

Soluble Potash (K ₂ O)4	' %
Sulfur (S)	2%
Derived from elemental sulfur and potassium hydroxide	

Active Ingredients

Humic acids......20%

Derived from leonardite.





CARBON BASED BIO-FERTILIZERS

MICROBIAL COMPONENTS

- Blend of naturally occurring microbes that work together to convert resources already present in the soil and atmosphere into usable plant nutrition
- Rhizosphere competent sourced from the soil
- Quality assured professionally fermented and backed by Certificate of Analysis documenting cfu/gram counts
- ✓ Bacillus amyloliquefaciens
- ✓ Bacillus megaterium
- ✓ Bacillus subtilis
- √ Saccharomyces cerevisiae
- √ Trichoderma harzianum

NUTRIWISE BENEFITS

- Enhances Nutrient Use Efficiency (NUE) of blended chemical fertilizers.
- Improves soil fertility and organic matter.
- Reduces fertilizer leaching and supports beneficial microbes.
- Provides uniform slow-release nitrogen for consistent growth.
- Prevents growth surges by releasing nitrogen gradually.



NutriWise® G is an eco-friendly granular soil inoculant that fixes nitrogen from the atmosphere, solubilizes phosphate and unlocks potassium from the soil.



NutriWise® WSP is a water soluble microbial powder for spray or soil applications and should be applied with a source of fulvic or humic acid.

NutriWise WSP is used all season to supplement and re-inoculate early season applications of NutriWise granular.

Application Instructions

NutriWise C

Replace 20-25% of soil-applied granular NPK with NutriWise G. Apply as per your normal fertilizer schedule and method.

NutriWise WSP

Initial Application: 6-9 oz/acre using flood jet nozzles.
Follow-Up Applications: 3-6 oz/acre every 2-4 weeks (preferably every 2 weeks). For monthly applications, use the higher rate.





MICROBIAL SOIL INOCULANT

ABOUT

The beneficial microorganisms in **RemeD8™AG-WSP Plus** help increase nutrient availability, enhance nutrient cycling, improve soil structure, and support strong root development, creating a more productive growing environment.

ACTIVE INGREDIENTS

5.3 X 10° cfu *Bacillus amyloliquefaciens* per gram 2.4 X 10° cfu *Bacillus licheniformis* per gram 1.1 X 10° cfu *Bacillus megaterium* per gram 4.5 X 10° cfu *Bacillus subtilis* per gram 1.0 X 10⁷ cfu/gram *Trichoderma atoviride*

Inactive Ingredients:

Sucrose based culture medium

RemeD8 AG-WSP Plus contains the addition of Trichoderma, which is known to improve seed germination, emergence rate and plant height as well as improve nutrient uptake and plant vigor.

Application Instructions

Soil and Foliar Applications:

Add 0.15 to 1.0 ounces per gallon of spray solution to a clean spray tank. Agitate solution and maintain agitation during application. Apply at planting and every 2-4 weeks during the growing season.

WHAT TO EXPECT

- A more vigorous soil ecosystem
- Higher Cation Exchange Capacity (C.E.C.)
- Enhanced root development, germination rates and stress tolerance
- Faster nitrification process for better uptake of nitrogen
- Nitrogen fixation to supplement applied nitrogen
- Enhanced stress tolerance
- Quicker recovery from pathogen attack
- Prevention of excessive hydrophobic organic matter

THE MICROBES

• Durable and sustainable:

All are spore formers, which can survive adverse conditions such as heat, cold, low/high pH, etc.

• Rhizosphere competent:

All were sourced from the soil, so they can thrive in soil.

• Quality Assured:

All are professionally fermented, identified through DNA analysis and backed by Certificate of Analyses documenting cfu/gram counts.

Prolific Enzyme Producers:

Together, they produce a wide range of beneficial enzymes and bio-active compounds that offer plant health benefits.



FOLIAR POTASIUM ACETATE FERTILIZER

ABOUT

Suprex™ K29 is a highly efficient source of potassium, offering superior foliar absorption compared to traditional potassium fertilizers. Its potassium acetate formulation has a smaller molecular size and a natural compatibility with organic acids, making it a more effective choice for foliar fertilization.

Research has shown that Suprex K29 delivers up to 5X greater foliar uptake than conventional potassium sources such as potassium nitrate, potassium thiosulfate, potassium sulfate, and potassium chloride. Manufactured with organic acids, it is an excellent tank mix partner, working safely alongside other NPK and micronutrient products.

With a very low salt index, Suprex K29 provides exceptional plant safety, even at higher application rates. Its near-neutral, non-aggressive composition allows for enhanced foliar nutrient uptake, ensuring plants receive potassium more efficiently with minimal stress.

GUARANTEED ANALYSIS

Soluble Potash (K₂O).....29%

Derived from potassium acetate

BENEFITS

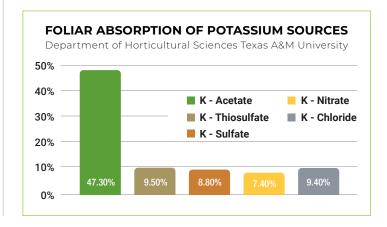
- Unmatched foliar absorption
- Lower use rates than other forms of potassium
- Foliar uptake is up to 5x greater than other sources

Excellent Tank Mix

- Organic acid derived nutrient aids in tank mixing
- Highly compatible, non aggressive form of potassium

Plant Safety

- Reduced risk of phytotoxicity
- Safe for stressed plants



Application Instructions

Apply 2 to 8 quarts per acre every 14 to 21 days as needed. See Full label for detailed instructions





WATER SOLUBLE FERTILIZERS WITH MICRONUTRIENTS

ABOUT

Vibrant® Water-Soluble Fertilizers deliver highly efficient, readily available nutrients to crops, ensuring rapid uptake and plant response. Formulated for precision agriculture, Vibrant fertilizers provide essential nutrients to support root development, flowering, and fruit production.

Enhanced with Krystal Klear® chelated micronutrients, Vibrant products promote overall plant health, nutrient efficiency, and stress tolerance. Designed for easy application, excellent compatibility, and cost-effective performance, Vibrant fertilizers help growers achieve stronger yields and healthier crops.

BENEFITS

- Rapid nutrient availability for efficient correction of mineral deficiencies
- Highly soluble for easy mixing and uniform application
- Versatile application—compatible with most fertilizers and tank-mix programs
- Supports root development, flowering, and fruit production with balanced formulas
- Formulated with patented Krystal Klear® micronutrients for enhanced nutrient efficiency
- Dual chelation technology improves nutrient uptake and plant availability
- Enhances overall plant resilience to environmental stress
- Reliable and cost-effective solution for maintaining crop health and performance



Vibrant 0-24-42 is a water soluble fertilizer with 8.6% S, 0.1% B, 0.25% Fe, 0.5% Mn & 0.3% Zn



Vibrant 0-0-38 is a water soluble fertilizer with 15% S, 0.1% B, 0.5% Fe, 1.0% Mn, 0.0005% Mo & 0.6% Zn

Contact your Performance Nutrition rep for other water soluble blend options!

Application Instructions

Vibrant water soluble fertilizers are recommended as a supplement to a well-balanced fertilizer program only.

Foliar Spray: May be applied with all types of ground spraying equipment.

Apply 5 pounds per 100 gallons of water per acre. Do not exceed a concentration of 10 lb. per 10 gallons of water.

For best results, repeat every 14 days taking soil and weather conditions into consideration.



FISCHEN

LIQUID FISH HYDROLYSATE

Vibrant® Fischen liquid fish hydrolysate is a 100% natural product made through a specialized cold-process enzymatic digestion of fresh water rainbow trout, ensuring no chemicals are used and preserving all beneficial oils and proteins. It serves as a rich source of natural protein and mineral nutrients for plants and soil microbes, offering a fresh fish scent without the offensive odor associated with fish emulsions.

BENEFITS

- Enriches the soil and promotes fertility.
- Introduces beneficial microbes and mycorrhizae.
- Boosts biological activity by supporting soil microbes.
- Improves fertilizer efficiency and nutrient uptake.
- Accelerates root establishment & increases root mass.
- Enhances plant growth, flowering, and fruit production.
- Enhances soil water retention & reduces transplant shock
- Aids in thatch degradation.

GUARANTEED ANALYSIS

Total Nitrogen (N)2.0%	
1.7% Water Soluble Nitrogen	
0.3% Water Insoluble Nitrogen	
Available Phosphate (P ₂ O ₅)3.0%	
Soluble Potash (K ₂ O)	
Derived from fish hydrolysate and Sulfate of Potash	

Application Instructions

Apply 2 - 3 gallons per acre 4 times a year. See label for complete instructions.

XTRAKT VIBRANT

WORM CASTING EXTRACT

Vibrant® XTRAKT is a premium low-salt organic fertilizer derived exclusively from earthworm castings and enriched with a proprietary blend of soil microbes and mycorrhizae to rejuvenate soil and support healthy plants. Produced in a climate-controlled environment with a consistent, wastefree diet for the worms, Vibrant XTRAKT ensures reliable quality year-round. Safe for both soil and foliar applications, its low-salt formulation prevents plant burn, while being free of pathogens, animal and Yard waste.

BENEFITS

- Low-salt, chlorine-free organic fertilizer with low odor.
- Easy to apply and won't clog equipment.
- Concentrated and long-lasting for fewer applications.
- Provides essential nutrients, enzymes, amino acids, and trace elements.
- Supports beneficial soil microbes and improves soil fertility.
- Helps rebuild overworked, unproductive soil.

GUARANTEED ANALYSIS

Total Nitrogen (N)	0.5%
0.5% Water Soluble Nitrogen	
Available Phosphate (P ₂ O ₅)	0.02%
Soluble Potash (K ₂ O)	0.02%
Derived from Earthworm Castings	

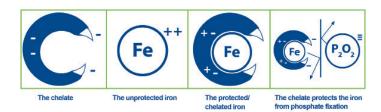
Application Instructions

Mix 2.5 to 5.0 gallons of per 100 gallons of water. Apply as needed. See label for complete instructions.



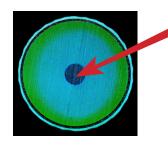
WHAT ARE CHELATES?

The word chelate (pronounced: "key-late") is derived from the Greek word "chele" which literally means "claw". Hence, chelate refers to the pincer-like manner in which a metal nutrient ion is encircled by the larger organic molecule (the claw), usually called a ligand or chelator.



Chelated micronutrients are protected from oxidation, precipitation, and immobilization in certain conditions because the organic molecule (the ligand) can combine and form a ring encircling the micronutrient. The pincer-like manner in which the micronutrient is bonded to the ligand changes the micronutrient's surface property and favors the uptake efficiency of foliarly applied micronutrients.

Chelation occurs when certain large molecules form multiple bonds with a micronutrient, protecting it from reacting with other elements in the nutrient solution and increasing its availability to the plant.



Chelated metal being protected from attraction to other materials.

Why are Krystal Klear micronutrient solutions so effective?

Dual Chelation: Utilizes patented, biodegradable IDS-40 in conjunction with EDTA to maximize the benefits of both chelating agents.

Stability Constant: Refers to the equilibrium state of a metal cation and a ligand to form a chelating complex: A good stability constant is one in which the bond is strong enough to hold the metal in solution but not so strong that it doesn't release the metal when applied.

Number of ligands: This refers to the ligands or "legs" that bond the metal to the chelating agents. For example, EDTA has 6 and IDS-40 has 5 ligands while citric acid has 3 carboxylic ligands and glucoheptonate has 1. The higher the number of legs means more cation surface area is covered.

That is why both EDTA and IDS-40 chelated metals are stable in orthophosphate solutions for an extended period while others fall apart and precipitate over time.





PATENTED CHELATED MICRONUTRIENT SOLUTIONS

ABOUT

Krystal Klear® micronutrient solutions are produced using a patented "dual-chelation" system for optimal performance. Krystal Klear micronutrient solutions have excellent tank-mix compatibilities, provide quick uptake of micronutrients, and deliver a sustained response.

KRYSTAL KLEAR PRODUCT OPTIONS		
Krystal Klear® Agra Mix II Chelated 2% B, 2% Mn, 2% Zn and 0.5% Cu solution	Field Crops: Apply I quart per acre when plants are young. This is the time when the most severe deficiencies occur.	
Krystal Klear® Agra Mix III Chelated 2% B, 2% Mn, 2% Zn, 0.5% Cu and 0.25% Fe solution	Vegetables: Apply 1/2 to 1 quart per acre each spray. Krystal Klear Mixes can be incorporated into the normal spray program.	
Krystal Klear® Crop Mix II Chelated 4% Zn, 1% Mn, 0.5% Cu, 0.25% Fe and 0.1% B solution	Tree & Vine Crops: Apply 1 quart per 125 gallons of spray mixture. If concentrated spray is used, increase the concentration in direct proportion to the dilution.	
Krystal Klear® B 5% complexed boron solution	Complexed boron for quick corrections of boron deficiency. Boron is essential for optimal root and tissue levels.	
Krystal Klear® Cu 5% chelated copper solution	Quickly corrects copper deficiencies. Copper is essential for crop growth and the activation of many enzymes.	
Krystal Klear® Fe 4% chelated Fe	Quickly corrects iron deficiencies.	
Krystal Klear® Mg 3% chelated magnesium solution	Magnesium is essential for photosynthesis in plants and prevents yellowing of leaves.	
Krystal Klear® Mn 5% chelated manganese solution	Quickly corrects manganese deficiencies. Manganese activates enzymes required for amino acid production.	
Krystal Klear® Zn 9% chelated zinc solution	Quickly corrects zinc deficiencies. Zinc controls the synthesis of indoleacetic acid, which regulates plant growth.	





MICRONUTRIENT SOLUTIONS

ABOUT

Vergence™ micronutrient solutions provide highly available manganese (Mn) and zinc (Zn) to support optimal plant growth and development. Formulated with IDS-40 and citric acid, these solutions ensure efficient nutrient uptake in soil applications, reducing the risk of tie-up and improving availability to crops. Vergence Mn (5% Mn) and Vergence Zn (9% Zn) deliver essential micronutrients that play a crucial role in photosynthesis, enzyme activation, and overall plant vigor.

BENEFITS

- Highly available micronutrient for improved nutrient uptake and plant utilization
- Formulated with IDS-40 and citric acid to enhance stability and prevent soil tie-up
- Supports chlorophyll production, enzyme activity, and overall plant metabolism
- Promotes stronger root development and healthier plant growth
- Ideal for soil applications, providing targeted micronutrient support where plants need it most

VERGENCE® PRODUCT OPTIONS		
VERGENCE Mn	Formulated with 5% Mn derived from manganese IDS and manganese citrate	
VERGENCE Zn	Formulated with 9% Zn derived from zinc IDS and zinc citrate	

If You Have a Soil or Leaf Analysis Recommendation, Apply Vergence® Zinc at the Following Rates

Elemental Zn required* (lb./acre)	Quarts of Vergence® Zn	Pounds of Vergence® Zn
1	0.36	1
2	0.72	2
3	1.08	3
4	1.44	4
5	1.80	5

If You Have a Soil or Leaf Analysis Recommendation, Apply Vergence® Manganese at the Following Rates

Elemental Mn required* (lb./acre)	Quarts of Vergence® Mn	Pounds of Vergence® Mn
1	0.75	2
2	1.50	4
3	2.25	6
4	3.00	8

Application Instructions

Vergence products are recommended for use on all types of soils. Dilute before use to ensure uniform coverage. The product can be incorporated into liquid fertilizers or applied separately. Soil applications may be made by drip, sprinkler or band application. If you do not have a soil or leaf analysis then apply the following rates:

Maintenance Application - 1 quart per acre

Moderate Deficiency - 2 to 3 quarts per acre

Heavy Micronutrient Deficiency - 4 quarts per acre

Do NOT mix with ortho phosphate products.





ADVANCED PHOSPHITE FERTILIZER

ABOUT

Prudent® AG is a high-performance urea phosphite fertilizer designed to enhance nutrient uptake, plant vigor, and stress resilience in a wide range of crops. Provides a readily available phosphorus source that supports strong root development, improved nutrient efficiency, and natural plant defense mechanisms.

Phosphite is recognized for it's role in promoting healthy plant growth and resilience under environmental stress, and Prudent AG delivers these benefits in a cost-effective, easy-to-use formulation. Designed for compatibility with most fertilizers and crop protection products, it integrates seamlessly into fertility programs to maximize efficiency and crop performance. Whether applied through foliar sprays, fertigation, or soil applications, Prudent AG provides proven agronomic benefits for growers looking to support healthier, more productive crops.



BENEFITS

Enhanced Phosphite Technology

Formulated for efficient phosphorus availability and rapid plant response

Supports Disease Defense

Aids in strengthening plant cell walls and supporting natural defense mechanisms

Maximizes Nutrient Uptake

Improves phosphorus mobility for better root and foliar absorption

Compatible and Easy to Mix

Works well with most fertilizers, fungicides, and crop protection programs

Reduces Environmental Stress

Helps crops withstand challenging conditions, improving resilience and performance

Minimizes Scale Build-Up

Keeps unchelated metals stable in solution, reducing spray tank residue

Application Instructions

Apply 1 to 4 pints per acre per application.

Foliar Applications:

Cay be applied with all types of ground spraying equipment or by air.

Check label for specific rates and timing of applications.



LIQUID FERTILIZER

ABOUT

Embella™ is a liquid fertilizer designed to promote beneficial microbial activity. It is designed to feed the microbes that enhance the breakdown of nutrients to make them more available to the soil.

Embella is now formulated with three carbohydrate sources—monosaccharides, disaccharides, and oligosaccharides—to provide immediate, quick, and slow-release energy that sustains and expands microbial populations. This balanced approach ensures consistent microbial activity, leading to improved soil fertility, organic matter development, and overall plant resilience.

RESTORE THE SOIL BY FEEDING THE MICROBES!

Soil microbes rely on sugars as an energy source, with microbial uptake often surpassing plant uptake. These microbes convert simple sugars into complex molecules, helping to build soil organic matter while cycling nutrients and releasing carbon dioxide. By supporting microbial communities, soil structure is enhanced and nutrient availability is improved.

BENEFITS

TO THE SOIL

- Provides nutrition for native microbial populations, the driving force of any ecosystem
- Improves soil conditions and nutrient availability by unlocking nutrients that may be tied-up in the soil
- Encapsulates nutrients and keeps them in the root zone for plant uptake
- Improves the water holding capacity of the soil
- Reduces leaching
- Nutrients stay in the root zone where plants can use them and out of ground water, aquifers and other waterways
- Improves soil aeration

TO THE PLANT

- Improves nutrient uptake
- Strengthens cell walls
- Increases root depth and mass
- Enhances drought, disease and stress tolerance
- Supports plant's immune response

Application Instructions

Soil apply 8-12 oz. per acre in furrow, as side-dress (with or without fertilizer) or on/near planting surface. Foliar apply as needed at a rate of 4-6 oz. See full label for detailed instructions.

DO NOT EXCEED 8 OZ. PER ACRE WHEN APPLYING WITH SELECTIVE HERBICIDES.







BLENDED PHYTOHORMONE SOLUTIONS

AGRA-ROUSE

Agra-Rouse® is a blend of bio-stimulants containing naturally-occurring and synthetic plant growth regulators and plant hormones known to encourage root development and propagation, promote cell division and enhance plant health. The phytohormones work with the plant's own natural physiology to stimulate growth, increase vigor and improve overall plant health.

BENEFITS

- Faster seed germination
- Plants are more tolerant of heat, cold and drought
- Deeper roots
- Promote healthier plants that is more resistant to disease

AGRA-ROUSE CONTENTS

.09% Indole-3-Butyric Acid (IBA) – Auxin .05% Gibberellins .05% Cytokinins

Application Instructions

Field Crops, Fruits, Tree Nuts, Vegetables, Herbs & Spices: 4 - 8 oz. per acre

Seed Treatment: 1 - 4 oz. per 100 pounds of seed

Transplant and Rooting Solutions: 1 - 2 oz. per 5 gal. of solution

INCITE

Incite® is a blend of bio-stimulants containing naturally-occurring and synthetic plant growth regulators and plant hormones known to **promote cell division**, **shoot initiation**, **and bud formation**, **and**, **stimulate chlorophyll synthesis and leaf expansion from cell enlargement**.

They work with the plant's own natural physiology to stimulate top growth, increase vigor and improve overall plant health.

BENEFITS

- Increase leaf growth in plants
- Help recovery from both winter and summer damage
- Increase plant growth during the season
- Accelerate growth in newly seeded areas

INCITE CONTENTS

.05% Indole-3-Butyric Acid (IBA) – Auxin .05% Gibberellins .09% Cytokinins

Application Instructions

Field Crops, Fruits, Tree Nuts, Vegetables, Herbs & Spices: 4 - 8 oz. per acre

Seed Treatment: 1 - 4 oz. per 100 pounds of seed

Transplant and Rooting Solutions: 1 - 2 oz. per 5 gal. of solution



POLYMER ADJUVANT AND ANTI-TRANSPIRANT

ABOUT

Argosy® RF is a water-soluble, environmentally safe polymer matrix that enhances the efficacy and longevity of pesticides, nutrients, and plant hormones. By encapsulating the active ingredient, it provides superior adhesion, even in rain, irrigation, and high humidity, reducing runoff and ensuring longer-lasting effectiveness.

Its elastic properties stretch with plant growth, maintaining consistent coverage and reducing the need for frequent reapplication. Additionally, Argosy RF improves drought tolerance, reduces plant stress, and enhances nutrient uptake, helping crops stay healthier and more productive while saving time and resources.

INGREDIENT DISCLOSURE

Inert ingredients	0.62%
Water	99.38%
TOTAL	100.00%

DRAWS AMBIENT MOISTURE FROM ATMOSPHERE TO LEAF!



BENEFITS

Enhanced Pesticide Efficacy

Improves vegetation management by ensuring longerlasting pesticide action, reducing plant mortality rates, and increasing yields.

Drought Resistance

Retains moisture on the plant surface, reducing irrigation needs and helping plants recover faster from drought stress.

Improved Nutrient Efficiency

Boosts the performance of fertilizers and plant hormones, leading to higher stress resistance, faster rooting, and stronger plant growth.

Reduces Environmental Impact

Minimizes runoff and bounce, leading to better area control and less environmental waste. Supports organic growing practices.

Fewer Applications Required

Saves labor and reduces the need for companion products by maintaining coverage longer, even after rain, and improving drift control.

Application Instructions

Apply as a 0.125 to 1.25 % solution (1 pint to 1.25 gallons per 100 gallons of solution)

See product label for complete directions for use.

Evaluation of chemical compatibility is the sole responsibility of the user.



FUNGICIDE - WATER-SOLUBLE PK FERTILIZER - TANK BUFFER

ABOUT

Nutrol® is a fungicide that controls powdery mildew and other foliar and soil-borne diseases, prevents alkaline hydrolysis to maintain pesticide effectiveness, and delivers highly concentrated phosphorus and potassium for plant nutrition. With a low salt index and no risk of phytotoxicity, it's safe for foliar, soil, and drip irrigation applications, making it an essential tool for crop protection and nutrient management.

When used with Prudent® fertilizers, Nutrol also helps control soil-borne and foliar pathogens.

GUARANTEED ANALYSIS

Available Phosphate (P ₂ O ₅)	50%
Soluble Potash (K ₂ O)	32%
Derived From: Monopotassium phosphate	

Application Instructions

Nutritional Applications

Apply Nutrol as a readily available source of P & K. (See Label for Rates)

Tank Buffer Applications

A 1% solution of Nutrol will help buffer tank solutions and prevent alkaline hydrolysis.

Disease Control Applications

Apply Nutrol to control Powdery Mildew and other soil and foliar diseases.

See product label for complete directions for use.

FUNGICIDE

- Fungicide labeled for use to control and eradicate powdery mildew and other soil-borne and foliar diseases
- Prevents the formation of resistant strains of powdery mildew when used in alternation with other labeled fungicides

TANK BUFFER

- Ensures optimal performance by preventing alkaline hydrolysis, which is the breakdown of pesticides by alkaline pH
- True buffer and can maintain the pH of tank solutions (The pH of a 1% aqueous solution of Nutrol in distilled water is 4.5 +/- 0.3)

NUTRIENT

- Highly concentrated, water-soluble fertilizer containing over 50% P₂O₅ and 32% K₂O
- Safe to use, has the lowest salt index of any fertilizer and will not cause phytotoxicity even at high concentrations
- Suitable for foliar, soil and drip irrigation applications

Nutrol is an excellent tank buffer that will acidify and buffer distilled water to a pH range of 4.5 – 5.5. Many pesticides can start to lose their efficacy immediately if they are mixed with alkaline solutions. By adding Nutrol to the tank, you can buffer the tank solution and ensure that pesticide applications are effective and are delivered to the target pest at the manufacturer's desired activity. This means fewer re-sprays, more consistent performance, and reduced chemical usage and labor costs.



Nitrogen:

Used most out of the three primary macronutrients, nitrogen is the major constituent in chlorophyll. It affects shoot and root growth, density, color, disease resistance and stress tolerance.

Phosphorus:

Second most important primary macronutrient, phosphorous is an essential part of photosynthesis and impacts the rate of seedling development, maturation and root growth.

Potassium:

The third most important primary macronutrient, and typically occurs naturally in the soil. Essential for cell division, cell electrolyte balance and the functioning of the stomates and influences drought tolerance, cold hardiness and disease resistance.

Calcium:

Buffers the soil pH, making it more alkaline, and is essential for root health, growth of new roots and root hairs and the development of leaves.

Magnesium:

Essential for photosynthesis (part of chlorophyll), improves utilization and mobility of phosphorus and acts as an activator of many plant enzymes.

Sulfur:

Found in amino acids that make up plant proteins, and activates certain enzyme systems.

Boron:

Aids production of sugar and carbohydrates and in cell division and cell wall formation.

Chlorine:

Required for photosynthesis.

Copper:

Involved in photosynthesis, respiration and the formation of lignin. Regulates cell wall construction and cell growth and division.

Iron:

Essential for the formation of chlorophyll, photosynthesis and nitrogen metabolism.

Manganese:

Stimulates enzymatic activity, helps chloroplast production and enhances root growth and fruit development. May influence resistance to certain diseases.

Molybdenum:

Helps in nitrogen fixation and is required for protein synthesis.

Nickel:

Essential component of the plant's natural defense system.

Zinc:

Required for the synthesis and functioning of chlorophyll, is involved in the plant hormone system and is a catalyst for auxin.

NOTES



