



# start finish 2

FOR FRUITS,  
VEGETABLES,  
& NUTS CROPS

A comprehensive liquid fertilizer system  
powered by Bio-K® to maximize your crop's potential

POWERED BY  
bio-K®

2022-2023

**NACHURS®**









# About NACHURS®

NACHURS is a liquid fertilizer brand that has revolutionized farming practices since 1946. NACHURS offers high quality precision-placed, seed-safe liquid starters and the latest technologies to maximize crop potential.

## Flexible Applications from Start2Finish®

- In-Furrow
- Banded
- Fertigation
- Strip-Till
- Sidedress
- Foliar

## 7 Production Facilities

- Marion, OH
- Belle Plaine, SK
- Corydon, IN
- Garretson, SD
- New Hamburg, ON
- Red Oak, IA
- St. Gabriel, LA

## Liquid Fertilizer Technologies



### Contact Us

800.622.4877 x 255  
info@nachurs.com

### U.S. Headquarters

421 Leader Street  
Marion, OH 43302

### Social



## THE NACHURS WAY...MORE THAN JUST A STARTER...

# 1. Liquid Starter Opportunities

NACHURS at planting product options have a neutral pH and are lower in both salt index and impurities than traditional product options. NACHURS offers flexible product options for seed placed and banded fertility at planting.

Placement with the seed product options position readily available nutrient, initiating crop establishment, early development and plant vigor. The beside the row option provides many of the same early benefits along with greater nutrient delivery for supporting the future demand of high yielding crops.

NACHURS liquid starters contain 50%–100% of the phosphorus in the orthophosphate form which is immediately available to the plant at the onset of growth.

# 2. NACHURS Foliar Opportunities

Foliar feeding is one of the most efficient methods of supplying nutrients during critical growing stages. NACHURS foliar fertilizers provide available N-P-K and chelated micronutrients to make a good crop even better or it can supply a deficient, stressed crop the proper nutrients for a quick recovery. NACHURS programs offer the following foliar products: micronutrients, N-P-K fertilizers, and slow release nitrogen products. These products can also be customized and combined to ensure crop success.

# 3. NACHURS Micronutrients

NACHURS 100% EDTA chelated micronutrients are designed to be combined with NACHURS liquid starters and foliars, allowing the product to be placed directly with the seed at planting time, or on the plant foliage. NACHURS products have a neutral pH and are low in both salt index and impurities. Placement with the seed allows the EDTA chelated micronutrients along with the available phosphorus and potassium to be taken up at the critical early stages of growth to maximize yield potential.

NACHURS EDTA chelated micronutrients are formulated to easily mix with NACHURS fertilizers for foliar feeding, allowing for fast absorption into the plant in a very short period of time. This rapid uptake at critical growth stages promotes plant health and increased yield potential.

NACHURS liquid starters and foliars when mixed with NACHURS EDTA chelated micronutrients are immediately available to the plant during the critical early stages of growth.



## NACHURS® In-Furrow Starters: The Basics

### Why do farmers use in-furrow starters?

- Starter is essential for quick, more uniform emergence to help set maximum yield potential through precision placement
- Larger root systems
- Improve phosphorus utilization early in the season when environment is not conducive (i.e. cold, wet, low biological activity)
- A soil test is NOT required to use a starter other than for rate determination
- Makes a perfect carrier for other products (i.e. micronutrients, organic acids, biologicals)

### Why are NACHURS in-furrow starters the BEST option?

- Seed safe
- Balanced N-P-K orthophosphate/ Bio-K® formulations
- Low salt
- Non-corrosive
- True solution
- Dedicated/supportive staff
- EDTA micronutrients, humic acids, and crop protection products
- Increased efficiency due to placement
- Clean, easy handling solutions
- High solubility
- Neutral pH
- Storability

## The NACHURS® Bio-K® Story

### THE PROBLEM

An alarming trend of declining potassium levels and lack of availability at key demand times.

### THE RESULT

With the combination of higher yields, newer genetics, production practices, reduced tillage, and decreasing potassium levels in your soil, farmers are jeopardizing plant structure, plant health and stress tolerance which negatively affects yield potential, decreases harvest efficiency and profitability.

### THE SOLUTION



NACHURS innovative potassium technology Bio-K will address these costly issues. NACHURS Bio-K is a proven technology that is more efficient and readily taken up by the plant better than any other potassium source in the market today.

### Farmer Benefits

- Multiple application methods
- Non-corrosive to equipment
- Mixability with crop protection products
- Product flexibility

### Crop Benefits

- Seed safe
- Improves nutrient use efficiency
- Improves plant health and stress
- Highest K solubility
- Reduces water loss and wilting
- Increases photosynthesis
- Balanced plant nutrition



## NACHURS® Technology Products Overview



NACHURS® Bio-K® is a premium source of potassium fertilizer combined with a natural plant metabolite; the most effective and efficient source of potassium. Using Bio-K® technology results in quicker germination, improved root development, and an elevated abiotic stress tolerance; leading to better plant establishment, more vigorous growth, and higher yields.



NACHURS® Aqua-Tech® is a unique polyamine technology that allows for greater plant productivity through fertigation systems, delivering highly available low-salt nutrients safely and precisely. Offering much flexibility, Aqua-Tech® products can be used in-furrow and foliar on a variety of crops. Aqua-Tech® contains NACHURS® Bio-K® technology which ultimately leads to better plant establishment, more vigorous growth, and higher yields.



NACHURS® Rhyzo-Link® is a Proprietary Plant Growth Promoting Rhizobacteria (PGPR) technology, delivering the highest concentration of multi-strain, pure culture rhizobacteria. This technology ultimately leads to increased soil and plant health benefits resulting in maximum and sustainable yield potential.





## Strategic Applied Fertilizer: Reallocation

Maximizing Return on Investment (ROI) begins with prudent use of crop nutrient; placing the most effective form of nutrient at the most impactful site.

Shifting inputs from less effective products to more efficient products positioned where the plant can make better use of the input adds value to both production and spending efficiency.

When considering reallocation, one must position first all the applications that offer the greatest impact on the crop then finish up the nutrient budget with the less effective products such as broadcast dry granule fertilizers.

High impact treatments target periods in growth when nutrient is needed most or for critical activities such as establishment, early vegetation and plant vigor, sound plant structure and reproduction and finally, crop fill and maturation.

NACHURS Start2Finish program is designed to position high performance products during application periods; designed to supply nutrient during critical demand periods.

Generations of America's farmers have used NACHURS liquid fertilizers because it is a quality brand they can trust. NACHURS Bio-K products offer the latest technology advancements farmers need to take their crops to the next level.



The NACHURS Bio-K System  
for Maximizing Crop Yields

Simple yet effective, profitable yet sustainable, **Start2Finish®** is a comprehensive liquid fertilizer system to maximize your crop's potential.



### RIGHT SOURCE

Matches fertilizer type to crop needs.



### RIGHT RATE

Matches amount of fertilizer to crop needs.



### RIGHT TIME

Makes nutrients available when crops need them.



### RIGHT PLACE

Keeps nutrients where crops can use them.

## NACHURS Is A 4R Partner: A Concept Of The International Plant Nutrient Institute (IPNI)

### ✓ RIGHT SOURCE

NACHURS Liquid Fertilizers are manufactured with the highest quality raw materials at six locations throughout North America since 1946.

### ✓ RIGHT RATE

Seed safe at recommended rates, NACHURS products have a low salt index and are non-corrosive. Each drop has the exact same ratio or percentage of nutrients.

### ✓ RIGHT TIME

NACHURS efficiently delivers nutrients to the growing crop, and mixes well with many pesticides for quicker emergence and superior control in one application.

### ✓ RIGHT PLACE

NACHURS liquid starter fertilizers are safe when placed directly on the seed and will not harm germination. **PROVEN PERFORMER.**



# start finish2

## The NACHURS® Bio-K® System

### For fruit, vegetable and nut crops

In every cycle of growth and for nearly every crop, there are opportunities within the growth cycle where we can have influence on crop production, whether it be to support a component of growth during a peak nutrient demand or responding to an induced deficiency. Experience has taught us that there are traditionally four periods within the growth cycle where we can make treatments that will positively influence crop development and ultimately improve the crops marketable value. If we focus on these four periods when we approach the development of a nutrient plan or when we plan a treatment we can increase the effectiveness of our application and have a better opportunity to reach our desired result.



#### Establishment

Transplant solution and/or starters can establish quick rooting and vigorous growth



#### Vegetative

Based on discovery and crop requirements, build a drip program addressing the bulk of the nutrient requirement supporting growth and reproduction.



#### Flower & Fruit Set

Focus your effort on continued plant health, stress mitigation and fruit development



#### Fruit Finish

The key to good production, higher quality and crop integrity is all about plant health, cellular integrity, the development of solids and desired attributes such as color, flavor, aroma and shelf life.





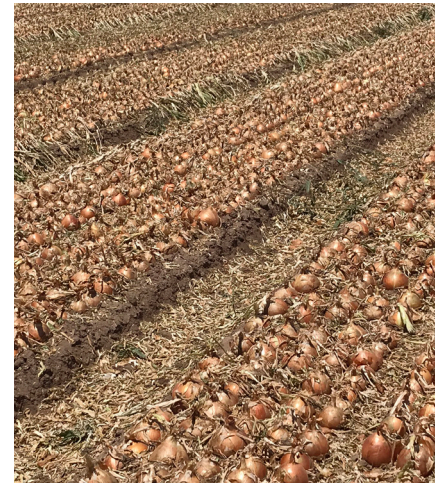


## Transplant Solutions

Transplant solutions promote strong plant structure and plant health from the very beginning. Healthy plants mean a quicker establishment with fewer replants. NACHURS, with our Rhyzo-Link® and Bio-K® technologies provide a number of options to create a transplant solution right for your crop, application method and environment.

## Starters

Bed/Row placed starters offer more available nutrient for young plants even in the most challenging soil conditions; promoting plant vigor for early vegetative growth and a better foundation for reproduction and fruit development. **NACHURS Rhyzo-Link® PE** and our **NACHURS Triple Option®** premium starters make great crop safe choices for most crops.



## Fertigation/Drip Mixes

Balanced fertility can be delivered frequently matching delivery to plant uptake; maximizing nutrient utility and timing of application. Choosing from the traditional and premium lines of products growers can make up a variety of blends for fertigation bringing nutrient delivery, efficiency and performance to any core nutrient program.







### ▲ Sidedress

NACHURS offers options that add value to any traditional nitrogen application. Growers have choices today with **NACHURS K-flex® MAX** and **NACHURS K-fuse®**, adding another option to bring the additional advantages of the Bio-K line into production.



### ▲ Foliar

Foliar applications can be highly effective when built in to nutrient programs. Foliar applications allow growers to be responsive to changing environmental and plant conditions while targeting precise treatments for induced nutrient deficiencies or crop demand during critical growth periods. NACHURS offers a number of foliar options beginning with **NACHURS Finish Line®** alone or combined with products like **NACHURS Triple Option®**, **NACHURS K-fuel®** and **NACHURS CropMax®**.





### Greenhouse Production

Providing flexibility in nutrient content with superior product quality and crop safety, NACHURS offers growers a wide scope of options for blending drip mixes while combining foliar options to create a total nutrient program for most crops.










### Tree Crops










Utilizing all the above advantages, NACHURS offer growers of tree fruit and nut crops options for fertigation and foliar applications that meet core nutrient and micronutrient demands of most crops.





# NACHURS® Product Reference

Start2Finish® Products	Nutrition	PRS
<b>NACHURS Balance®</b> Powered by Bio-K® <ul style="list-style-type: none"> <li>Balanced NPK containing boron, cobalt, and molybdenum</li> </ul>	Boron, Cobalt, Molybdenum, Nitrogen, Phosphorus, Potassium	
<b>NACHURS Finish Line®</b> Powered by Bio-K <ul style="list-style-type: none"> <li>Unique micronutrient enriched premium foliar fertilizer</li> <li>Contains proprietary organic acids, compatibility agents and higher level of micronutrients</li> <li>Provides a significant return on investment when used on all crops</li> </ul>	Boron, Copper, Manganese, Nitrogen, Phosphorus, Potassium, Zinc Fulvic Acid	
<b>NACHURS First Down®</b> Powered by Bio-K <ul style="list-style-type: none"> <li>Low salt, 100% orthophosphate specifically designed for corn and wheat</li> <li>Quick and uniform plant emergence, ultimately results in maximizing yield potential</li> </ul>	Nitrogen, Phosphorus, Potassium	
<b>NACHURS imPulse®</b> Powered by Bio-K <ul style="list-style-type: none"> <li>Provides corn and wheat growers quick and uniform plant emergence</li> <li>Improved early season plant health</li> <li>Ultimately results in maximizing yield potential</li> </ul>	Nitrogen, Phosphorus, Potassium	
<b>NACHURS K-Flex®</b> Powered by Bio-K <ul style="list-style-type: none"> <li>Most versatile Bio-K technology product available</li> <li>Compatible with 10-34-0, UAN, and liquid urea</li> <li>Allows applications of K &amp; S during critical growth stages maximizing yield potential</li> </ul>	Potassium, Sulfur	
<b>NACHURS K-Flex MAX</b> Powered by Bio-K <ul style="list-style-type: none"> <li>Specially formulated to be blended with UAN</li> <li>Allows for more K and S to be supplied per acre with UAN</li> <li>Maximizes yield potential</li> </ul>	Nitrogen, Potassium, Sulfur	
<b>NACHURS K-Fuel®</b> Powered by Bio-K <ul style="list-style-type: none"> <li>Highest concentration of Bio-K technology in the industry</li> <li>Contains a versatile source of K for growers requiring higher K levels</li> <li>Allows applications of K during critical growth stages, maximizing yield potential</li> </ul>	Potassium	
<b>NACHURS N-Rage® MAX</b> Powered by Bio-K <ul style="list-style-type: none"> <li>A premium slow release nitrogen fertilizer</li> <li>Complete NPK fertilizer containing the highest percentage of SRN</li> <li>Takes crops with excellent potential to the next yield level</li> </ul>	Nitrogen, Potassium, Sulfur	
<b>NACHURS Triple Option®</b> Powered by Bio-K <ul style="list-style-type: none"> <li>Premium NPK fertilizer</li> <li>Also contains S</li> <li>Versatile in-furrow or foliar nutrition offering crop growers rapid nutrient uptake</li> </ul>	Nitrogen, Phosphorus, Potassium, Sulfur	

Micronutrients	Nutrition	PRS
<p><b>NACHURS CropMax®</b></p> <ul style="list-style-type: none"> <li>• A premium blend of micronutrients designed for soil application at planting, seeding, or sidedress</li> <li>• Contains 100% EDTA chelated nutrients which prevents tie up with the soil and with other nutrients</li> <li>• Designed to be used on a wide range of crops</li> </ul>	Boron, Copper, Iron, Manganese, Molybdenum, Zinc	
<p><b>NACHURS® 10% Boron</b></p> <ul style="list-style-type: none"> <li>• Premium liquid boron</li> <li>• For the prevention and correction of micronutrient deficiency</li> </ul>	Boron	
<p><b>NACHURS® 3% Ca EDTA</b></p> <ul style="list-style-type: none"> <li>• 100% EDTA chelated liquid calcium</li> <li>• For the prevention and correction of micronutrient deficiency</li> </ul>	Potassium, Calcium	
<p><b>NACHURS® Liqui-Cal®</b></p> <ul style="list-style-type: none"> <li>• Liquid calcium and nitrogen</li> <li>• For the prevention and correction of nutrient deficiency</li> </ul>	Nitrogen, Calcium	
<p><b>NACHURS® 6% Mn EDTA</b></p> <ul style="list-style-type: none"> <li>• 100% EDTA chelated liquid manganese</li> <li>• For the prevention and correction of micronutrient deficiency</li> </ul>	Potassium, Manganese	
<p><b>NACHURS® 4.5% Fe EDTA</b></p> <ul style="list-style-type: none"> <li>• 100% EDTA chelated liquid iron</li> <li>• For the prevention and correction of micronutrient deficiency</li> </ul>	Nitrogen, Iron	
<p><b>NACHURS® 9% Zn EDTA</b></p> <ul style="list-style-type: none"> <li>• 100% EDTA chelated liquid zinc</li> <li>• For the prevention and correction of micronutrient deficiency</li> </ul>	Nitrogen, Zinc	
<b>Special Use</b>		
<p><b>NACHURS Humi-flex® MAX</b></p> <ul style="list-style-type: none"> <li>• Soil and fertility catalyst designed to improve soil health and maximize utilization of nutrients</li> <li>• Contains humic acid, which is processed using proprietary technology</li> <li>• Designed to be used on a wide range of crops</li> </ul>	Humic Acid	
<p><b>NACHURS Rhyzo-Link® PE</b> Powered by Bio-K</p> <ul style="list-style-type: none"> <li>• A complete package of high quality N-P-K-S, micronutrients, and PGPR</li> <li>• Rhyzo-Link contains a multi-strain microbial component</li> </ul>	Nitrogen, Phosphorus, Potassium, Sulfur	

Addition application rates are optional. Consult your NACHURS Sale Representative or Agronomist.

It is always recommended that a jar test be done when adding to other fertilizer or chemicals. Always read and follow the pesticide labels when considering tank mixing pesticides with fertilizer products. CAUTION WHEN MIXING WITH UAN: The temperature of UAN being below 50°F, use sufficient water to provide thorough mixing of solution. A ratio of 1:1 to NACHURS K-Flex®/K-Flex® MAX is recommended.

\*PRODUCTS MAY NOT BE AVAILABLE IN EVERY STATE.









Introducing

 **ADVANCED  
ADJUVANTS<sup>®</sup>**  
BY NACHURS ALPINE SOLUTIONS

The newest products from  
Nachurs Alpine Solutions  
to enhance yields of  
North American Farmers.

### Why choose Advanced Adjuvants?

With Advanced Adjuvants you can expect that same dedication to quality, integrity and innovation you experience with NACHURS.

- Commitment to service, quality, and value
- Proven line of high-performance products

### Our Line of Adjuvants

- Kovar Fortitude SR™ – A proprietary adjuvant for soil residual herbicides
- Kovar Force VR™ – A multifunctional adjuvant with an industry leading volatility reducing agent
- Kovar Exalt HSO™ – A High Surfactant Oil Concentrate
- Kovar Condition CS™ – A Non-AMS water conditioner (AMADS)
- Kovar Ampio DR™ – A proprietary adjuvant for drift reduction
- Kovar Flair NS™ – A proven nonionic surfactant

**For more information, contact:  
Matt Cimino, Sales Manager**

ph: 512-450-8090  
mcimino@nachurs.com  
advancedadjuvants.com





# Premium Liquid Fertilizers Since 1946

In-furrow Starters • Side-dress  
Additives • Foliar Nutrition  
Fertigation • Micronutrients

# start finish<sup>2</sup>

**NACHURS**<sup>®</sup>



Always the innovator, never the imitator.<sup>®</sup>

Contact Us

800.622.4877 x 255  
info@nachurs.com

U.S. Headquarters

421 Leader Street  
Marion, OH 43302

Social



© 2022 Nachurs Alpine Solutions. All rights reserved.