



REGENERATION IS THE NEXT GENERATION OF GROWTH.

2024 Product Guide

NexusBioAg

SUSTAIN YOUR LEGACY.

Table of contents

Micronutrients	3
Granubor (Boron)	6
F-212G (Copper)	7
F-156G (Magnesium)	8
F-227G (Iron)	9
F-287G (Manganese)	9
F-420G (Zinc)	10
Nexus Zinc Sulphate Granular	10
Nexus Copper 7.5% EDTA	11
Nexus Zinc 9% EDTA	11
Nexus Boron 10%	12
Nexus Manganese 5% EDTA	12
YieldMax Liquid 10-10-10	13
YieldMax WS 18-20-20	13
Solubor	14
Nexus Liquid Copper 5%	15
Nexus Liquid Boron 10%	16
Nexus Liquid Zinc 7%	17
Nexus Liquid Manganese 7.5%	18
Nitrogen Stabilizers	19
NEON Air	22
NEON Surface	23
DRIVE-N	24

NexusBioAg

NexusBioAg is proud to provide an extensive portfolio of innovative products which includes industry leading biostimulants, micronutrients, nitrogen stabilizers, and foliar products.

NexusBioAg is committed to launching innovative products that focus on sustainability and regenerative agriculture because that's what it will take to keep farmers, the nation and the planet thriving.

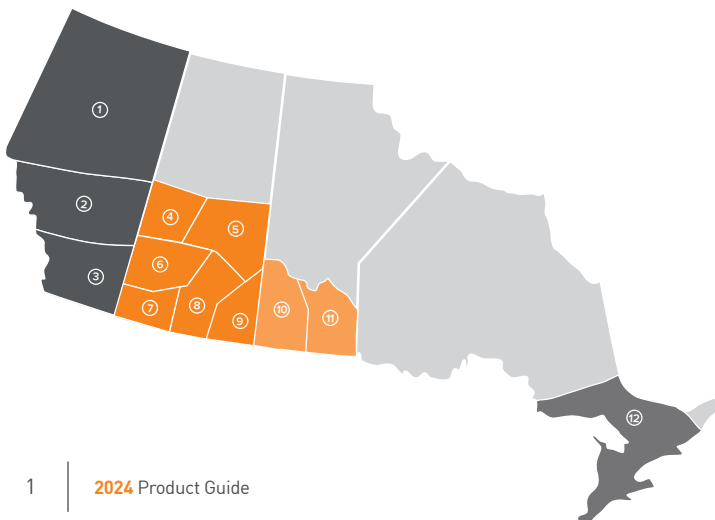
With innovative products in our commercial pipeline, our collaboration with customers and strategic suppliers through the BioAdvantage Trials (BAT) program has shown the validity and success of this multi-year large-scale field trials program conducted across Canada.

Proven research, testing and performance. That's what it takes to be the innovation leader in the agriculture market. Work with us and you'll be working with a dedicated team that provides solutions designed to help you unleash the true potential of your farm. And we help you do so in a sustainable way that benefits agriculture, the consumers, the environment, and society as a whole.

NexusBioAg strives to help meet the needs of increasingly unique agricultural businesses. Through best-in-class capabilities, a collaborative team-oriented approach, and our commitment to agricultural integrity, NexusBioAg is helping our customers innovate and grow. Thank you for your continued support and wishing you a prosperous 2024 growing season.

SUSTAIN YOUR LEGACY.

To contact your local NexusBioAg Representative and learn more about our product portfolio, visit nexusbioag.com.





BioAdvantage Trials

PROOF, NOT PROMISES.



Over the past 9 years, efforts from producers, retailers, and agronomists have contributed to making the BioAdvantage Trials program the leading field scale testing program in the industry.

The successful development and testing of products has contributed to a deeper understanding of the agronomics, placement, and real-world performance of the portfolio. As a result of your commitment to the program, over **700** trials – across **6** provinces, with **17** different products on **13** different crops have been completed.

As we continue to invest in innovation and diversify our portfolio, we look forward to incorporating our new and exciting products into the BAT program. Since 2022, we added 10 new products to the program – including new inoculants and products from our micronutrient and nitrogen stabilizer portfolios.

Continuing for a fourth year is our Track-A-Trial program. Track-A-Trial follows featured trials from our BAT program throughout the growing season. These trials highlight key products and crops from seed, to root dig, all the way to harvest providing in-season updates from NexusBioAg team members. Thank you for your continued support, and we look forward to collaborating on future BioAdvantage Trials to test the new and existing products from the NexusBioAg portfolio.

Visit BATResults.ca to view BioAdvantage Trial results in your area.

Track-A-Trial
with NexusBioAg

Micronutrients

Granular - Liquid - Foliar

Enhance the Future of Your Farm From the Ground Up

All Crops

Element Overview

Nutrients play a vital role in plant growth. When critical elements are deficient or not available, growth and yield is compromised. German organic chemist Justus von Liebig discovered the law known as *Law of the Minimum*: plant growth – and thus yield – will be poor if just one nutrient is deficient, even if all other factors and nutrients are adequate. Plant growth is improved when the supply of the deficient nutrient is increased.

NexusBioAg has a portfolio of products to help provide the most essential nutrients for healthy, productive plants.

Elements

B

BORON

- Essential for all plant growth, aiding in the transfer of sugars and nutrients from leaves to fruit, and for specific functions in yield production by increasing pollination and seed development.
- An important nutrient for root growth, cell division, and is key for optimum pod production.
- Its main function is for plant cell division (growth) in early growth stages.
- Plants have high requirements for boron during reproductive growth, specifically pollination and seed set.

Cu

COPPER

- Essential for cell wall strength, specifically in the anther where the viability of pollen formation is crucial to the yield of the plant.
- Important for chlorophyll production, protein synthesis, respiration, and the efficient use of nitrogen.
- It's essential for standability and the metabolism of carbohydrates and proteins.
- Required for respiration within the plant.



Zn

ZINC

- Essential in a wide range of plant functions as an enzyme co-factor, in protein synthesis and protein structure, hormone regulation, early root development, energy production, and is key for seed formation.
- Plants have a high requirement for zinc during seed development and formation.
- Necessary for chlorophyll and carbohydrate production.
- Deficiencies result in stunting and reduced seed set.

Mg

MAGNESIUM

- Vital for the photosynthesis process and is a building block of chlorophyll.
- Highly involved in nitrogen uptake.
- Plays a critical role in chlorophyll synthesis with nitrogen.
- An enzyme activator.
- Deficiencies result in reduced yield and greater susceptibility to plant disease.

Fe

IRON

- Essential for plant respiration, photosynthesis, and enzyme reactions in all crops.
- An important component of the enzymes used by nitrogen-fixing bacteria in legume crops.

Mn

MANGANESE

- Essential in enzyme systems, photosynthesis, and root growth.
- Important in the synthesis of lignin for strength and stiffness of plant cell walls.

S

SULPHUR

- Has many critical functions in the plant, including the formation of chlorophyll, which is essential for photosynthesis.
- Important for yield and crop quality, and essential for enzyme activation, nitrogen metabolism; in oilseeds, sulphur is crucial for oil synthesis.
- The majority of sulphur in crops is as a constituent of three S-containing amino acids (cysteine, cystine, and methionine), which are the building blocks of protein.

Mo

MOLYBDENUM

- Its main function is to convert unusable nitrogen forms to plant-available forms.
- Required for nitrogen fixation in pulses.
- Critical for early growth at internode elongation.

NexusBioAg Micronutrients

NexusBioAg has a range of micronutrients available, in both sulphate and oxy-sulphate forms. Sulphate form supplies nutrients to the plant when applied. Oxy-sulphate form supplies nutrients for immediate plant availability while helping with soil buildup and extended plant needs.

- Our low analysis micronutrient products ensure a better distribution throughout the fertilizer blend.
- With optimum water solubility, the products provide excellent plant availability.
- Compatible with all fertilizer blends.

The 3 Forms Of Granular Micronutrients

Not All Micronutrients Are Made Equal - The Importance of Solubility

The key to any fertilizer is how much of it is available to the plant in that growing year. Yield increases are the result of nutrient application in a plant-available form when applied at the appropriate rate and at the right time and place.

Plants are only able to take up nutrients that have been dissolved into the soil solution. This makes it imperative to evaluate the solubility of the fertilizer product to ensure the crop is receiving the necessary nutrients. Applying a low-solubility (i.e. less than 30% water soluble) micronutrient has very little benefit to the crop in the year of application and may result in that crop showing symptoms of micronutrient deficiency.

Forms Of Granular Micronutrients

Sulphates

- 100% water soluble and highly available to the crop in the year of application.
- Quickly provides nutrients to plants and soil building.

Oxides

- Relatively insoluble, making them unavailable to the crop in the year of application.
- Used to build soil nutrient levels on a long-term basis rather than to correct deficiencies in the year of application.

Oxy-Sulphates

- Combination of oxides and sulphates within the same granule.
- Availability in the year of application is dependent on the balance of sulphate and oxide nutrients.
- Effective in the correction of current deficiencies and in longer term soil building.

Application Of Granular Micronutrients

When soil tests identify a deficiency for the upcoming cropping season, a sulphate or oxy-sulphate granular micronutrient should be used to ensure the crops have sufficient nutrition for maximum yield potential. When it comes to copper, zinc, and manganese, placement is key as these nutrients only move through diffusion (even in their soluble sulphate form). The granules should be placed in the seed row – or in close proximity to the seed row – to ensure the plant roots intercept these feeding sites.

Levels In Soil (ppm)

	DEFICIENT*	MARGINAL*	ADEQUATE
Copper	0.0-0.3	0.3-1.0	1.0+
Zinc	0.0-0.5	0.5-1.0	1.0+
Iron	0.0-2.0	2.0-4.5	4.5+
Manganese	0.0-1.0	-	1.0+

*Soil micronutrient range based on DTPA extraction method

All three forms of granular micronutrients have a place for specific circumstances within a cropping system – it is vital to choose the correct form of micronutrient that will lead to the desired results.



GRANUBOR®

All Crops

Product Overview

Boron (B) 15%

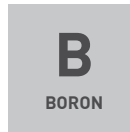
Granubor provides boron to meet the crop's demands during the growing season providing immediate availability of boron and supply for extended plant needs.

Key Benefits At A Glance

- The ore is dissolved in water and re-crystallized, removing any impurities and creating an extremely pure natural product.
- Sodium based boron is nearly 100% water soluble.
- Granubor is OMRI Listed for organic use.



Element



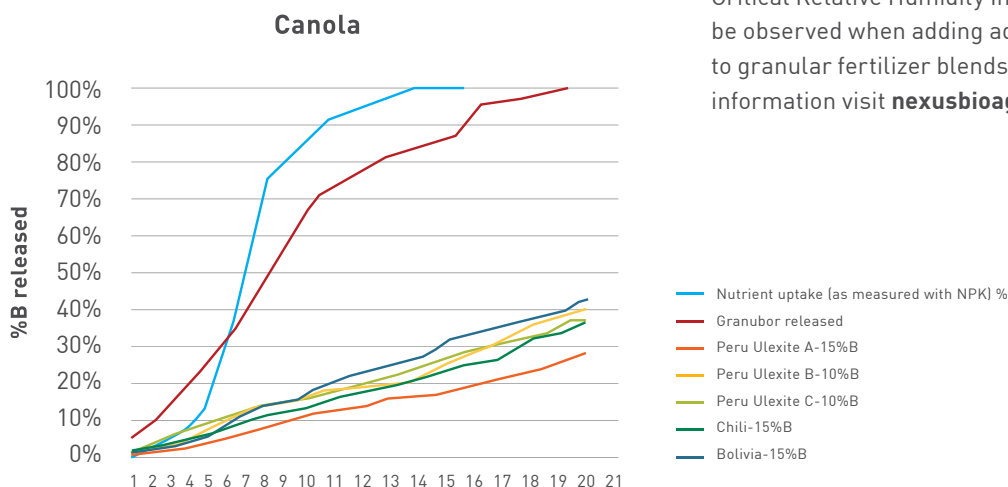
Application

- Use Granubor to match analysis where higher amounts of boron are needed.
- Can be broadcast, banded or seed placed.
- 7 lbs of product = 1 lb actual.
- If Granubor is seed placed with canola, a maximum of 7 lbs per acre of product should be used.

Agronomic consideration: A granular boron with 100% solubility that provides excellent boron plant availability. Compatibility with all fertilizer blends and provides immediate availability of boron and extended plant needs.

Handling and blending considerations: Normal bulk blending procedures. Use Granubor to match analysis where higher amounts of boron are needed.

Critical Relative Humidity Index (CRHI) must be observed when adding additional products to granular fertilizer blends. For additional CRHI information visit nexusbioag.com.



F-212G

12.5% Copper

Barley · Wheat

Product Overview

Copper (Cu) 12.5%
Zinc (Zn) 4.5%
Sulphur (S) 4.5%

F-212G is a homogenous grade of copper oxide and copper sulphate with a low analysis to ensure a better distribution throughout the fertilizer blend.

Key Benefits At A Glance

- F-212G has optimum water solubility providing excellent plant availability and compatibility with all fertilizer blends.
- Supplies an initial amount of copper sulphate for immediate needs and copper oxide for soil buildup and extended plant needs.
- A homogenous blend with a low analysis, to ensure a better distribution and maximum feeding sites throughout the field.

Elements



Application

- Normal bulk blending procedures.
 - Critical Relative Humidity Index (CRHI) must be observed when adding additional products to granular fertilizer blends. For additional CRHI information visit nexusbioag.com.
- This product is to be used in N-P-K blended fertilizer for soil application.
- Apply in the seed row or in close proximity to the seed row.
- 8 lbs of product = 1 lb actual copper.
- Use F-212G to match analysis where higher amounts of copper are needed.

How It Works

- 1 Copper diffuses outside of granule up to 1/2".
- 2 This creates a 1" sized feeding site.
- 3 With root interception of the feeding site the plant will receive enough copper for that year.
- 4 Remaining copper is used for soil building for future crops.

F-156G

36% Magnesium

All Crops



Copper Deficiency Symptoms

- 1 Tips begin to spiral or twist.
- 2 Light green in colour.
- 3 Poor standability.
- 4 Empty bleach/grey heads can appear like grey patches called melanosis, you can also see this discoloring on cereal stubble fields suffering from copper deficiency. Copper deficiency is often correlated with diseases such as ergot.



Element



Product Overview

Magnesium (Mg) 36%

F-156G is a moderately high analysis granular product for correcting magnesium deficiencies in the soil.

Key Benefits At A Glance

- A form of magnesium that resists leaching.
- Partly acidulated for immediate plant availability with the remaining magnesium in an oxide form to build soil magnesium reserves.
- Especially suitable for providing additional magnesium to grazing areas for livestock in areas susceptible to "grass tetany".

Application

- Use according to soil test.
- The usual range of application is from 10 to 50 lbs magnesium per acre in bulk applications, or 2 to 5 lbs magnesium per acre in a blended starter fertilizer.
- Normal bulk blending procedures.
 - Critical Relative Humidity Index (CRHI) must be observed when adding additional products to granular fertilizer blends. For additional CRHI information visit nexusbioag.com.

F-227G

40% Iron

All Crops

F-287G

28% Manganese

All Crops

Element



Product Overview

Iron (Fe) 40%

F-227G is a high analysis granular product used for short-term correction of iron deficiency symptoms in plants.

Key Benefits At A Glance

- Proactive prevention of deficiency in the plant is a better agronomic practice than trying to correct chlorosis once it appears.
- An acidic granule for solubilized iron is rapidly changed to insoluble phosphates, carbonates and bicarbonates.

Application

- Soil application as part of an N-P-K blend.
- 2.5 lbs of product = 1 lb actual.
- Normal bulk blending procedures.
 - Critical Relative Humidity Index (CRHI) must be observed when adding additional products to granular fertilizer blends. For additional CRHI information visit [nexusbioag.com](https://www.nexusbioag.com).

Agronomic considerations: Prevention of deficiency in the plant is a better practice than trying to correct chlorosis once it appears.

WARNING

This product will stain sidewalks and pools. It must be swept off before moisture reaches product. This product will "set-up" in storage or in final product.

Elements



Product Overview

Manganese (Mn) 28% Sulphur (S) 6%

F-287G is a high analysis granular product for correcting manganese deficiencies in the soil.

Key Benefits At A Glance

- Partly acidulated for rapid plant availability with the remaining manganese in finely divided oxide form for building soil reserves.
- F-287G is a form of manganese that resists leaching and resists conversion to unavailable forms.
- Approximately 40% water soluble.

Application

- Use product according to soil test.
- Typical broadcast rates are 4 to 20 lbs manganese per acre or about 1–4 lbs manganese per acre in the seed row.
- Soil application as part of an N-P-K blend.
- Normal bulk blending procedures.
 - Critical Relative Humidity Index (CRHI) must be observed when adding additional products to granular fertilizer blends. For additional CRHI information visit [nexusbioag.com](https://www.nexusbioag.com).

F-420G

20%

Zinc

All Crops

Nexus Zinc Sulphate Granular

All Crops

Elements



Product Overview

Zinc (Zn) 20%
Sulphur (S) 8%

F-420G is a homogeneous grade of zinc sulphate and zinc oxide with a low analysis to ensure a better distribution throughout the fertilizer blend and in the field.

Key Benefits At A Glance

- Optimum water solubility provides excellent plant availability.
- Supplies initial plant needs with zinc sulphate and provides zinc oxide for soil buildup and extended plant needs.
- Compatibility with all fertilizer blends.

Application

- This product is to be used in N-P-K blended fertilizer for soil application.
- 5 lbs of product = 1 lb actual.
- Normally apply at a minimum of 2 lbs of actual zinc, 10 lbs of product per acre.
- Normal bulk blending procedures.
 - Critical Relative Humidity Index (CRHI) must be observed when adding additional products to granular fertilizer blends. For additional CRHI information visit nexusbioag.com.
- Use F-420G to match analysis where higher amounts of zinc are needed. Apply in the seed row or in close proximity.

Elements



Product Overview

Zinc (Zn) 35.5%
Sulphur (S) 18%

Nexus Zinc Sulphate Granular is derived from zinc sulphate monohydrate, designed for granular blends and direct field applications.

Key Benefits At A Glance

- Optimum water solubility provides excellent plant availability and compatibility with most fertilizer blends.
- Product analysis of 35.5% zinc will supply initial amount of zinc sulphate for immediate plant availability.

Application

- 2.8 lbs of product = 1 lb actual.
- Normally apply at a minimum of 3 lbs of actual zinc, 8.45 lbs of product per acre.
- Normal bulk blending procedures.
 - Critical Relative Humidity Index (CRHI) must be observed when adding additional products to granular fertilizer blends. For additional CRHI information visit nexusbioag.com.
- Use Nexus Zinc Sulphate Granular to match analysis where higher amounts of zinc are needed. Apply in the seed row or in close proximity to the seed row.

Nexus Copper

7.5% EDTA

All Crops

Nexus Zinc

9% EDTA

All Crops

Element



Product Overview

Copper (Cu) 7.5% EDTA

Key Benefits At A Glance

Nexus Copper 7.5% EDTA is a fully chelated solution of copper EDTA and is recommended for the prevention and correction of copper deficiency in crops.

Rates

Nexus Copper 7.5% EDTA Rates - Soil Applied

RATE	PRODUCT LITRES/ACRE	ACTUAL CU/ACRE (LBS)	ACRES PER 10 LITRES
Low rate	0.5	0.11	20
Medium low rate	0.66	0.15	15
Medium high rate	0.75	0.17	13
High rate	1	0.22	10

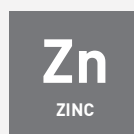
Application

For soil application in combination with liquid fertilizer blends.

General recommendations: Use rates vary from 0.5 litres to 1 litre/acre, depending on copper deficiency.

Handling and blending considerations: Best practice is to add the Nexus Copper 7.5% EDTA into the blend after the UAN, then the phosphate product, followed by the liquid sulphur. Do not exceed the sulphur product by more than 10% of the total blend.

Element



Product Overview

Zinc (Zn) 9% EDTA

Key Benefits At A Glance

Nexus Zinc 9% EDTA is a fully chelated solution of zinc EDTA and is recommended for the prevention and correction of zinc deficiencies in crops.

Rates

Nexus Zinc 9% EDTA Rates - Soil Applied

RATE	PRODUCT LITRES/ACRE	ACTUAL ZN/ACRE (LBS)	ACRES PER 10 LITRES
Low rate	0.5	0.13	20
Medium low rate	1	0.26	10
Medium high rate	1.5	0.39	6.67
High rate	2	0.52	5

Application

For soil application in combination with liquid fertilizer blends.

General recommendations: Use rates vary from 0.5 litres to 2 litres/acre, depending on zinc deficiency.

Handling and blending considerations: For blending with liquid fertilizer products. Order of adding products or the amount of various products does not matter.

Nexus Boron

10%

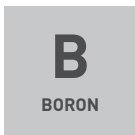
All Crops

Nexus Manganese

5% EDTA

All Crops

Element



Product Overview

Boron (B) 10%

Key Benefits At A Glance

Nexus Boron 10% is an effective, readily available source of boron for soil and foliar applications to crops.

Rates

Nexus Boron 10% Rates - Soil Applied

RATE	PRODUCT LITRES/ACRE	ACTUAL B/ACRE (LBS)	ACRES PER 10 LITRES
Low rate	0.5	0.15	20
Medium rate	0.75	0.2	13.33
High rate	1	0.3	10

Application

Compatible with and may be applied in water or mixed with most liquid fertilizers, micronutrients, or crop production products.

General recommendations: Usage rates vary from 0.5 litres to 1 litre/acre, depending on boron deficiency.

Handling and blending considerations: For blending with liquid fertilizer products. The order in adding products or amounts does not matter.

Element



Product Overview

Manganese (Mn) 5% EDTA

Key Benefits At A Glance

Nexus Manganese 5% EDTA is a fully chelated solution of manganese EDTA and is recommended for the prevention and correction of manganese deficiency in crops.

Rates

Nexus Manganese 5% EDTA Rates - Soil Applied

RATE	PRODUCT LITRES/ACRE	ACTUAL MN/ACRE (LBS)	ACRES PER 10 LITRES
Low rate	0.75	0.1	13.33
Medium low rate	1	0.13	10
Medium high rate	1.5	0.2	6.66
High rate	2	0.26	5

Application

The preferred use is as a soil application to prevent deficiency and may also be used as a foliar spray to provide correction when a soil application is impractical.

General recommendations: Use rates vary from 0.75 litres to 2 litres/acre, depending on manganese deficiency.

Handling and blending considerations: For blending with liquid fertilizer products. The order in adding products or amounts does not matter.

YieldMax Liquid

10-10-10

YieldMax WS

18-20-20

All Crops

Product Overview

PRODUCT	YIELDMAX LIQUID	YIELDMAX WS
Nitrogen (N)	10%	18%
Phosphate (P)	10%	20%
Potassium (K)	10%	20%
Boron (B)	0.02%	0.08%
Copper (Cu)	0.05%	0.15%
Iron (Fe)	0.1%	0.1%
Manganese (Mn)	0.05%	0.1%
Zinc (Zn)	0.05%	0.1%
Molybdenum (Mo)	0.0005%	0.0005%

Complete package of macro and micronutrients which are essential building blocks to maximize yield potential. Feed the need with a foliar application of YieldMax.

Key Benefits At A Glance

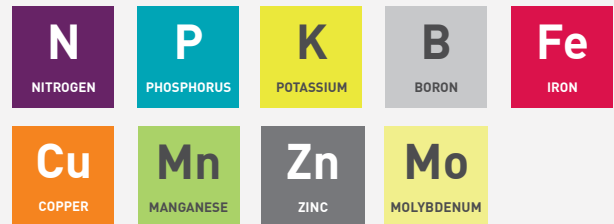
- Variable rates to meet the specific nutrient needs of the crop.
- Flexible foliar application, compatible with crop protection products, with other fertilizers or can be applied alone.
- Flexible application by ground sprayer, airplane or overhead sprinklers.

Rates

YieldMax Liquid 10-10-10 Rates - Foliar

RATE	LITRES/ACRE
Low rate	1
Medium rate	2
High rate	3
Pea rate	1.5

Elements



Application

YieldMax Liquid may be applied by ground sprayer, airplane or overhead sprinklers. YieldMax Liquid (10-10-10) is recommended for use as a source of plant nutrients in a fertilization program that relates to the fertility of the soil.

A normal rate of this product is 3.5 pounds per acre (5.61 kg/ha). YieldMax Liquid should be mixed with between 10 litres/ac and 100 litres/ac of water. YieldMax Liquid may be applied many times throughout the growing season. Applications are generally 10 to 14 days apart.

YieldMax WS is a foliar feed product and should be applied to green growing leaves. Can be applied alone, with pesticides, or with other fertilizers. YieldMax WS may be applied via ground sprayers (high-volume or low-volume), aircraft or fertigation systems.

Use rates vary from 2 lbs to 5 lbs/acre, depending on level of nutrient deficiency.

YieldMax WS 18-20-20 Rates - Foliar

RATE	PRODUCT PER ACRE (LBS)	ACRES PER BAG
Regular rate	5	11
Pea rate	2.75	20

Solubor[®]

All Crops

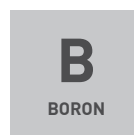
Product Overview

Boron (B) 20.5%

Key Benefits At A Glance

- Foliar applications of boron are effective in supplying sufficient boron for flowering and reproductive development in crops.
- The product has a fine particle size and is more soluble than Borax especially in cold water, making it the recommended choice for the application in solution.
- Solubor is one of the more commonly used product names for disodium octaborate tetrahydrate ($\text{Na}_2\text{B}_8\text{O}_{13}\cdot 4\text{H}_2\text{O}$).

Element



Application

Agronomic considerations: Used in soil and foliar sprays and in fertigation programs. Solubor is highly water soluble and is commonly applied in foliar sprays. Compatible with most pesticides.

General recommendations: Because the season for the most effective foliar application of boron is short, foliar sprays must be prepared quickly and accurately. Application rate is 2.4 lbs of Solubor, which provides 0.5 lb actual boron per acre.

Rates

Amounts of Solubor (20.5% B) to mix in spray tanks to supply of 0.5 lb of B/acre at various spray rates*

SPRAY RATE (GALS/ACRE)	SIZE OF TANK (GALLONS)					
	100	200	250	300	350	400
	POUNDS OF SOLUBOR REQUIRED					
10	24	49	61	73	85	97
15	17	33	41	49	57	65
20	12	24	30	36	43	49
25	10	20	24	29	34	39
30	8	16	20	24	28	32

*For tank sizes greater than 400 gallons, identify the desired spray rate and sum the pounds of Solubor required from the columns which add up to the size of a larger spray tank.

Ex) For a 750 gallon tank, sum the pounds of solubor required from the 400 gallon and 350 gallon columns.

Nexus Liquid

Copper **5%**

All Crops

Product Overview

Copper (Cu) 5%
Sulphur (S) 3%

Key Benefits At A Glance

- Nexus Liquid Copper 5% is recommended to prevent and correct copper deficiencies of field, row, and turf crops.
- For foliar application in cereal crops.

Rates

Nexus Liquid Copper 5% Rates - Foliar

RATE	PRODUCT LITRES/ACRE	ACTUAL CU/ACRE (LBS)	ACRES PER 10 LITRES
Regular rate	1	0.13	10
Flag leaf rate wheat	0.5	0.065	20

Regular rate:

- Should be used on all crops prior to flag leaf.
- This rate can be used on barley at all stages.

Flag leaf rate on wheat:

- Should be used at flag leaf on Hard Red Spring Wheat prior to any head emergence.

Water volume:

- May use minimum of 5 gallons of water prior to flag leaf.
- May use a minimum of 10 gallons of water at flag leaf application.

*Do not apply to crops if the head has emerged from the boot.

Elements



Application

Agronomic considerations: Can be applied alone, with crop protection products, other fertilizers, or may be applied directly to the foliage of growing crops. Nexus Liquid Copper 5% may be applied via ground sprayers (high-volume or low-volume), aircraft or fertigation systems.

General recommendations: Use rates vary from 0.5 litres to 1 litre/acre, depending on copper deficiency.

Nexus Boron

10%

All Crops

Product Overview

Boron (B) 10%

Key Benefits At A Glance

- Nexus Boron 10% is an effective, readily available source of boron for soil and foliar applications to crops.

Rates

Nexus Boron 10% Rates - Foliar

RATE	PRODUCT LITRES/ACRE	ACTUAL B/ACRE (LBS)	ACRES PER 10 LITRES
Regular rate	0.5	0.15	20

Element



Application

Compatible with and may be applied in water or mixed with most liquid fertilizers, micronutrients, or crop production products.

Agronomic considerations: Nexus Boron 10% is an effective, readily available source of boron for soil and foliar applications for plants.

General recommendations: Use rates vary from 0.5 litres to 1 litre/acre, depending on boron deficiency.

Handling and blending considerations: For foliar application a rate of 0.5 litres/acre is generally adequate.

Nexus Liquid

Zinc **7%**

All Crops

Product Overview

Zinc (Zn) 7%
Sulphur (S) 3.4%

Key Benefits At A Glance

- Nexus Liquid Zinc 7% is recommended to prevent and correct zinc deficiencies of field, row, vegetable and turf crops.
- For foliar application in all crops.

Rates

Nexus Liquid Zinc 7% Rates - Foliar

RATE	PRODUCT LITRES/ACRE	ACTUAL ZN/ACRE (LBS)	ACRES PER 10 LITRES
Regular rate	1	0.19	10
High rate	2	0.38	5

Elements



Application

Agronomic considerations: Can be applied alone, with crop protection products, other fertilizers, or may be applied directly to the foliage of growing crops. Nexus Liquid Zinc 7% may be applied via ground sprayers (high-volume or low-volume), aircraft or fertigation systems.

General recommendations: Use rates vary from 1 litre to 2 litres/acre, depending on level of zinc deficiency.

Nexus Liquid

Manganese **7.5%**

All Crops

Product Overview

Manganese (Mn) 7.5%
Sulphur (S) 4%

Key Benefits At A Glance

- Nexus Liquid Manganese 7.5% is recommended to prevent and correct manganese deficiencies of field, row, vegetable, and turf crops.
- For foliar application in all crops and can be applied in combination with most crop protection products.

Rates

Nexus Liquid Manganese 7.5% Rates - Foliar

RATE	PRODUCT LITRES/ACRE	ACTUAL MN/ACRE (LBS)	ACRES PER 10 LITRES
Regular rate	0.67	0.14	15

Elements



Application

Agronomic considerations: Use alone, with crop protection products, with other fertilizers, or may be applied directly to the foliage of growing crops. Nexus Liquid Manganese 7.5% may be applied via ground sprayers (high-volume or low-volume), aircraft or fertigation systems. For foliar application in all crops excluding RoundUp Ready® crops.

General recommendations: Use rates vary from 0.5 litres to 1 litre/acre, depending on level of manganese deficiency.

Nitrogen Stabilizers

Protect Your Investment and Your World
All Crops

Product Overview

- Protect your nitrogen against leaching, denitrification and volatilization with our full line up of Nitrogen Stabilizer products.
- Triple action protection with our line up of NEON products.
- Flexible fall or spring application when tanked mixed with UAN, urea or NH₃

Benefits of NexusBioAg's Line Up Of Nitrogen Stabilizers

- Select the right stabilizer to protect nitrogen against loss.
- Take advantage of fall applications of nitrogen.
- Ensure that your plants have available nitrogen longer into the growing season for optimal yields and proteins.
- Using a stabilizer is insurance to protect your valuable nitrogen investment.
- We don't know what the growing season will bring, hedge your investment with the proper stabilizer.

Benefits of PENXCEL Technology

- NEON Air, NEON Surface, and N-Yield use PENXCEL technology.
- PENXCEL drives active ingredients deeper into urea granules resulting in more effective protection of your investment.
- PENXCEL speeds the blending process.
 - With low viscosity, it pours quickly even in the cold weather. It easily coats and blends with fertilizer. It blends up to 25% faster than other industry standard formulations with granular fertilizer, saving time during the critical application season. It also is non-corrosive to your equipment.

How Nitrogen Stabilizers Reduce Nitrogen Loss




Urea

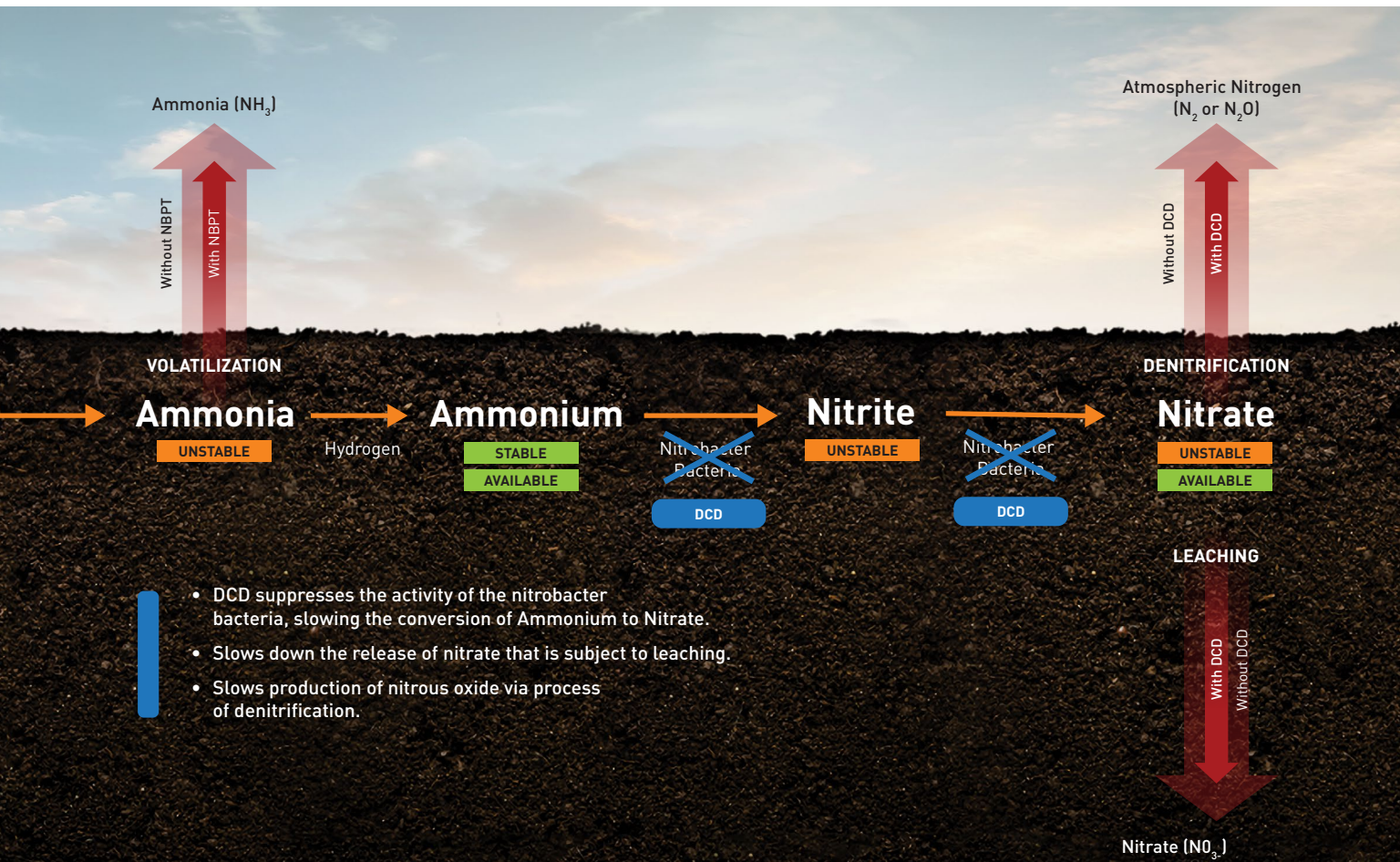
Urease Enzyme

NBPT

- NBPT strongly blocks the urease enzyme allowing time for rain or soil moisture to take the fertilizer into the soil during the first critical weeks.
- Losses can increase when fertilizer is applied to damp soil, where the crop residue is high and under a number of other weather and field conditions.



PRODUCT	APPLICATION
	Spring/Fall Primary for applications on the soil surface where volatilization is the challenge, with the added protection from losses to denitrification and leaching.
	Spring/Fall Designed for broadcast or shallow banding applications, with triple protection against volatilization, leaching and denitrification.
	Spring/Fall Designed for application on the soil surface where volatilization is the challenge.



Nitrogen Stabilizers

All Crops



PRODUCT	UAN			UREA		
	Spring	Summer	Fall	Spring	Summer	Fall
TIMING	Spring	Summer	Fall	Spring	Summer	Fall
METHOD	Band/Broadcast			Band/Broadcast		
STABILIZER	NEON SURFACE	NEON AIR	NEON SURFACE	NEON SURFACE	NEON AIR	NEON SURFACE
ACTIVES	17% NBPT & 25% DCD	30% NBPT & 15% DCD	17% NBPT & 25% DCD	17% NBPT & 25% DCD	30% NBPT & 15% DCD	17% NBPT & 25% DCD
RATE	1.5 L/MT	1 L/MT	1.5 L/MT	3 L/MT	2 L/MT	3 L/MT
WHY	UAN will be incorporated/banded in typically cool, wet soils. Provides balanced protection from losses if the weather turns hot, reducing dry volatilization. If the region receives rainfall, the DCD will aid in protection from leaching & denitrification.	UAN sideband or topdressed applications have high potential for volatilization losses if weather conditions are hot/dry. Get added protection from losses with NEON Air. If the nitrogen receives rainfall shortly after application, get added protection from leaching and denitrification.	Broadcast applications are highly not recommended. Banding UAN in fall/post harvest will require focused protection against losses to denitrification & leaching. Using NEON Surface will aid in keeping NH4 stable and also protect from volatilization losses.	UREA will be incorporated/banded in typically cool, wet soils. Ensure balanced protection from losses and reduce dry volatilization if the weather turns hot and dry with NEON Surface. If the region receives rainfall, the DCD will aid in protection from leaching & denitrification.	UREA sidebanded/top dressed will be applied with a large potential for volatilization losses if weather conditions are hot/dry. This is why there is the added protection in NEON Air. At the same time there is protection from leaching and denitrification, if the nitrogen receives rainfall shortly after application.	Broadcast and banding UREA in fall/post harvest will require a focused protection against losses to denitrification & leaching. Using NEON Surface will aid in keeping NH4 stable and also protect from volatilization losses.
DEFINITIONS	<p>NBPT (N-butyl-thiophosphoric -triamide) strongly blocks the urease enzyme in soil, which in turn reduces nitrogen losses to volatilization. Keeping nitrogen in the stable NH4+ (Ammonium) form.</p> <p>DCD (Dicyandiamide) inhibits the activity of the nitrosomonas bacteria in the soil, slowing the conversion of NH4+ (Ammonium) to NO3- (Nitrate), both of which are plant available forms. Once nitrogen is in the NO3- (Nitrate) form it is highly susceptible to rapid conversion to NO2- (Nitrogen Dioxide)/NO (Nitric Oxide)/N2O (Nitrous Oxide) all of which are easily lost due to being gaseous forms of nitrogen.</p> <p>VOLATILIZATION is the loss of plant available nitrogen gassing off through the conversion of NH4+ (Ammonium) to NH3 (Ammonia).</p> <p>DENITRIFICATION is the loss of nitrogen through the conversion of plant available nitrate to gaseous forms of N, such as: NO (Nitric Oxide), N2O (Nitrous Oxide), N2 (Dinitrogen gas).</p> <p>LEACHING is the loss of plant available nitrogen in the form of nitrates, physically moving away from the root zone with water. Both nitrate and soil are negatively charged so NO3- (Nitrate) cannot be bound by the soil and is at risk of leaching.</p>					



All Crops

Active Ingredients

NBPT 30%
DCD 15%

Primarily for application on the soil surface where volatilization is the challenge, with the added protection from losses to denitrification and leaching.

Features

- Protection of nitrogen from potential losses.
- Helps to create an efficient nitrogen source for all crops.
- Added to UAN to become a homogeneous liquid solution.
- Added to UREA to evenly coat and penetrate each granule to the core.
- Used in early spring and fall application of UREA or UAN
- Uses PENXCEL technology to penetrate granules deeper and improve blending.

Rates

NEON AIR Rates

FERTILIZER	LITRES/TONNE
Urea	2
UAN	1

Primary Protection From:

- Volatilization

Additional Protection From:

- Denitrification
- Leaching

Application

General recommendations: This nitrogen stabilizer is combined with urea or urea containing fertilizers prior to application. The combination, recognized as an enhanced efficiency fertilizer, can be incorporated or applied pre-plant, side-dress or used for surface applications. It helps to create an efficient nitrogen source for all crops. This product protects against nitrogen losses through volatilization, denitrification and leaching.



All Crops

Active Ingredients

NBPT 17%
DCD 25%

Designed for broadcast or shallow banding applications with balanced protection against nitrogen loss.

Features

- Protection of nitrogen from potential losses.
- Helps to create an efficient nitrogen source for all crops.
- Added to UAN to become a homogeneous liquid solution.
- Added to UREA to evenly coat and penetrate each granule to the core.
- Used with early spring and fall applications of UREA or UAN.
- Uses PENXCEL technology to penetrate granules deeper and improve blending.

Rates

NEON SURFACE Rates

FERTILIZER	LITRES/TONNE
Urea	3
UAN	1.5

Triple Protection From:

- Volatilization
- Denitrification
- Leaching

Application

General recommendations: This nitrogen stabilizer is combined with urea or urea containing fertilizers prior to application. The combination, recognized as an enhanced efficiency fertilizer, can be incorporated or applied pre-plant, side-dress or used for surface applications. It helps to create an efficient nitrogen source for all crops. This product protects against nitrogen losses through volatilization, denitrification and leaching.

Handling Conditions

General rate recommendations are based on average conditions. Rates may be adjusted higher as needed based on the field conditions, including the following:

- 1 Days of control needed: 20 millimeters of rain or irrigation are required to move urea into the soil.
- 2 Residue Level – Residues in excess of 30% present higher levels of urease and higher volatility can be expected.

N→YIELD[™]CX

NITROGEN STABILIZER

All Crops

Active Ingredients

NBPT 26.7%

Designed for application on the soil surface where volatilization is the challenge.

Features

- Helps to create an efficient nitrogen source for all crops.
- By slowing the urea conversion process to ammonia gas, less nitrogen is lost due to volatilization.
- Added to UAN to become a homogeneous liquid solution.
- Added to UREA to evenly coat and penetrate each granule to the core.
- Used in early spring and fall application of UREA or UAN.
- Uses PENXCEL technology to penetrate granules deeper and improve blending

Rates

N-Yield CX Rates

FERTILIZER	LITRES/TONNE
Urea	2
UAN	1.5

Protection From:

- Volatilization

Application

General recommendations: This nitrogen stabilizer is combined with urea or urea containing fertilizers prior to application. The combination, recognized as an enhanced efficiency fertilizer, can be incorporated or applied pre-plant, side-dress or used for surface applications. It helps to create an efficient nitrogen source for all crops. This product protects against nitrogen losses through volatilization.

3 Soil pH – Values higher than 7.0 pose risk of higher potential for volatility.

4 Poorly drained, waterlogged or heavily compacted soil.

5 Fields with porous soils, in areas with excessive water or rainfall.

6 Fields and crops that benefit from keeping the ammonium form of nitrogen available for a longer time.



NexusBioAg

SUSTAIN YOUR LEGACY.

If you would like more information or have questions, contact your local NexusBioAg Representative or visit nexusbioag.com

BioStimulants | Nitrogen Stabilizers | Micronutrients | Foliars

ALWAYS READ AND FOLLOW LABEL DIRECTIONS. ©2024 Univar Solutions Canada LTD. All rights reserved. Univar, the collaboration insignia, and other identified trademarks are the property of Univar Inc. or affiliated companies. All other trademarks not owned by Univar Inc. or affiliated companies that appear in this material are the property of their respective owners. The information contained herein can be changed without notice and you should contact the manufacturer to confirm. Read and follow the Product Label & Safety Data Sheet ("SDS") for your health. All information is based on data obtained from the manufacturer or other recognized technical sources. Univar Inc. and its affiliates ("Univar") provides this information "as is" and makes no representation or warranty, express, or implied, concerning the accuracy or sufficiency of the information and disclaims all implied warranties. Univar is not liable for any damages resulting from the use or non-use of the information and each Univar affiliate is responsible for its own actions. All transactions involving this Product(s) are subject to Univar's standard Terms and Conditions, available at univarsolutions.com or upon request.