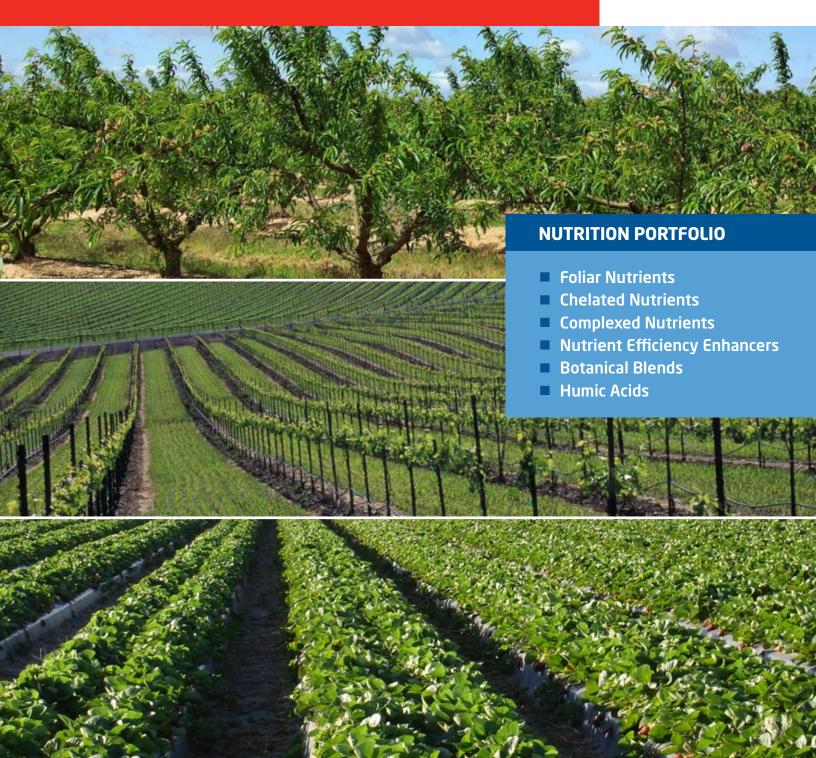
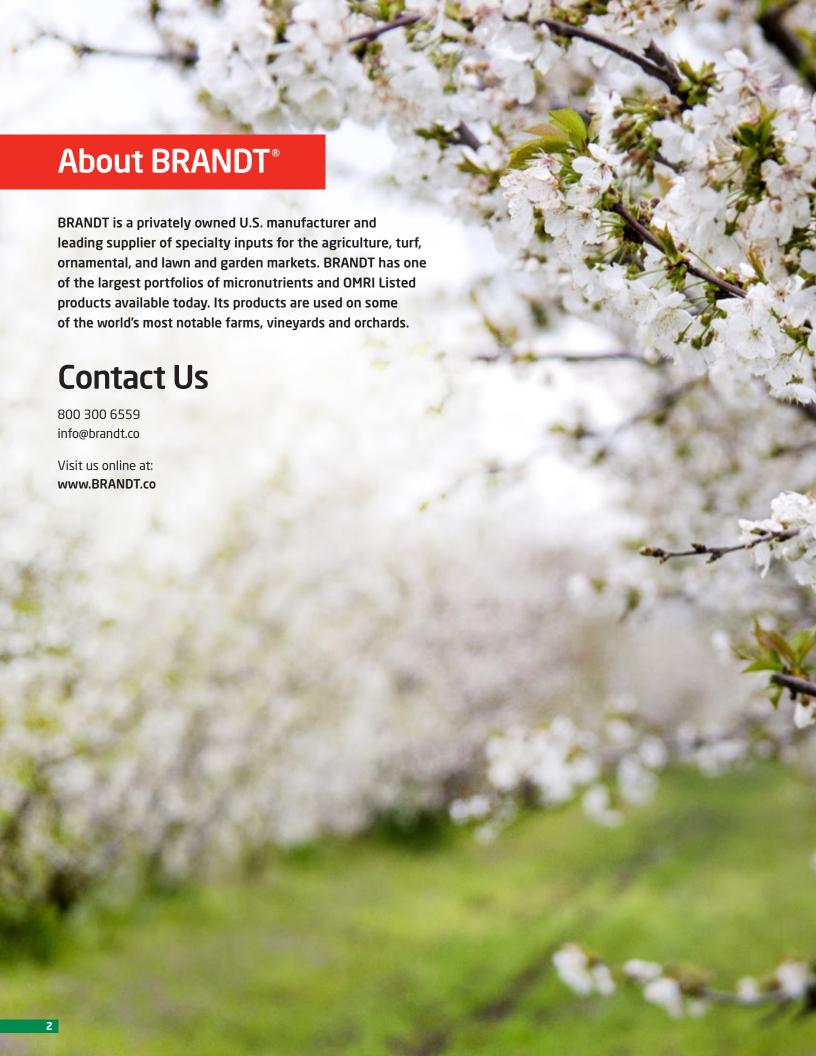


Plant Health Solutions







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Not all products are registered for sale in every country and all 50 U.S. states. Please check label for use and contact your BRANDT representative with any questions.

Foliar Nutrients



BRANDT Smart System®

Advanced Compatibility Foliar Nutrition

Smarter Foliar Nutrient Delivery

BRANDT Smart System foliar nutrients were designed for use in tank mix environments where compatibility concerns may have previously been a challenge. The proprietary formulations provide supplemental secondary and micronutrients to plant growing points quickly and effectively, and may be used in a wide range of tank mix solutions. BRANDT Smart System is an excellent option for in-season nutrient enhancement and replenishment and optimal plant health.

Key Advantages of BRANDT Smart System Technology:

- Increased application flexibility
- Excellent nutrient mobility and efficiency
- Improved crop health and stress tolerance
- Enhanced quality and yield
- Compatible with most herbicides, including glyphosate

BRANDT Smart B™

5.0% B

Derived from: Boric Acid

A NEW, highly efficient form of boron that won't precipitate out of acidic tank mixes. Also compatible with nitrate fertilizers.

BRANDT Smart B-Mo™

5.0% B 0.5% Mo

Derived from: Boric Acid and Sodium Molybdate

BRANDT Smart B formulation with 0.5% Mo added. Excellent for legumes.

BRANDT Smart Cu

5-0-0 5.0% N 3.0% S 6.0% Cu

Derived from: Urea and Copper Sulfate



BRANDT Smart Mn

6-0-0 6.0% N 3.5% S 6.0% Mn

Derived from: Urea and Manganese Sulfate

BRANDT Smart Trio®

4-0-0 4.0% N 3.0% S 0.25% B 3.0% Mn 3.0% Zn

Derived from: Urea, Boric Acid, Manganese Sulfate and Zinc Sulfate A proven, top selling nutrient combination for row crops.

BRANDT Smart Quatro®

1.5% S 2.0% B 3.0% Mn 0.1% Mo 3.0% Zn

Derived from: Sodium Borate, Manganese Sulfate, Sodium Molybdate and Zinc Sulfate

An excellent option for complex tank mixes. May also be aerial applied.

BRANDT Smart Zn

6-0-0 6.0% N 3.0% S 6.0% Zn

Derived from: Urea and Zinc Sulfate



BRANDT Manni-Plex®

High Performance Foliar Micronutrients

Maximize Crop Health, Quality and Yield

Manni-Plex foliar nutrients deliver specific, secondary and mirconutrient combinations to plants quickly and efficiently. Each formulation contains a proprietary sugar alcohol technology that acts as a nutrient carrier, which helps nutrients get through the leaf and into plant growing points more efficiently. Manni-Plex is an excellent option for in-season nutrient enhancement and replenishment for optimal plant health, quality and yield.

Key Advantages of Manni-Plex Technology:

- Greatly increases the absorption and movement of nutrients through the leaf cuticle
- Formulations coat leaves and make nutrients available longer
- Highly mobile and efficient proprietary molecule
- Compatible with most insecticides, fungicides and PGR's
- Improves crop health and stress tolerance

Foli-Cal®

5-0-0 5.0% N 10.0% Ca

Derived from: Calcium Acetate, Calcium Nitrate

Manni-Plex B Moly

5-0-0 5.0% N 3.3% B 0.5% Mo

Derived from: Urea, Boron Ethanolamine and Sodium Molybdate

Manni-Plex for Beans

2-0-0 2.0% N 0.2% B 0.3% Fe 3.2% Mn 0.01% Mo

Derived from: Urea, Sodium Borate, Iron Nitrate, Manganese Nitrate, Sodium Molybdate and Zinc Nitrate

Manni-Plex Cal-Mag

7-0-0 7.0% N 5.3% Ca 2.6% Mg

Derived from: Calcium Nitrate, Magnesium Nitrate

Manni-Plex Cal Zn

6-0-0 6.0% N 6.0% Ca 3.0% Zn

Derived from: Calcium Nitrate, Zinc Nitrate

Manni-Plex for Citrus

5-0-0 5.0% N 0.25% B 1.0% Fe 2.5% Mn 2.0% Zn

Derived from: Urea, Iron Nitrate, Manganese Nitrate, Zinc Nitrate and Sodium Borate

Manni-Plex for Corn

3-0-0 3.0% N 0.5% Mg 0.2% B 0.05% Cu 0.9% Mn

4.7% Zn

Derived from: Magnesium Nitrate, Copper Nitrate, Manganese Nitrate, Zinc Nitrate, Urea and Sodium Borate

Manni-Plex Fe

5-0-0 5.0% N 5.0% Fe

Derived from: Urea, Ferrous Sulfate

Manni-Plex K

0-0-20 20.0% K₂0

Derived from: Potassium Carbonate

Manni-Plex Mg

5-0-0 5.0% N 4.0% Mg

Derived from: Magnesium Nitrate, Urea

Manni-Plex Mn

7-0-0 7.0% N 5.0% Mn

Derived from: Manganese Nitrate, Urea

Manni-Plex Mo

8.0% Mo

Derived from: Sodium Molybdate

Manni-Plex Ni

7-0-0 7.0% N 5.0% Ni

Derived from: Nickel Nitrate, Urea

Manni-Plex for Pecans

5-0-0 5.0% N 1.0% Cu 0.5% Fe 2.0% Mn 3.0% Zn

Derived from: Urea, Copper Nitrate, Iron Nitrate, Manganese Nitrate and Zinc Nitrate



Manni-Plex for Small Grains

2-0-0 2.0% N 0.5% B 2.0% Cu 1.5% Mn 1.5% Zn

Derived from: Copper Nitrate, Manganese Nitrate, Zinc Nitrate, Urea and Sodium Borate

Manni-Plex for Tree Nuts

5-0-0 5.0% N 2.0% Mg 0.2% B 2.0% Cu 3.0% Zn

Derived from: Urea, Magnesium Nitrate, Sodium Borate, Copper Nitrate and Zinc Nitrate

Manni-Plex for Vegetables

5-0-0 5.0% N 1.8% Mg 0.4% B 1.25% Fe 0.9% Mn

0.9% Zn

Derived from: Magnesium Nitrate, Ferric Nitrate, Manganese Nitrate, Zinc Nitrate, Urea, Sodium Borate

Manni-Plex Zn

3-0-0 3.0% N 7.0% Zn

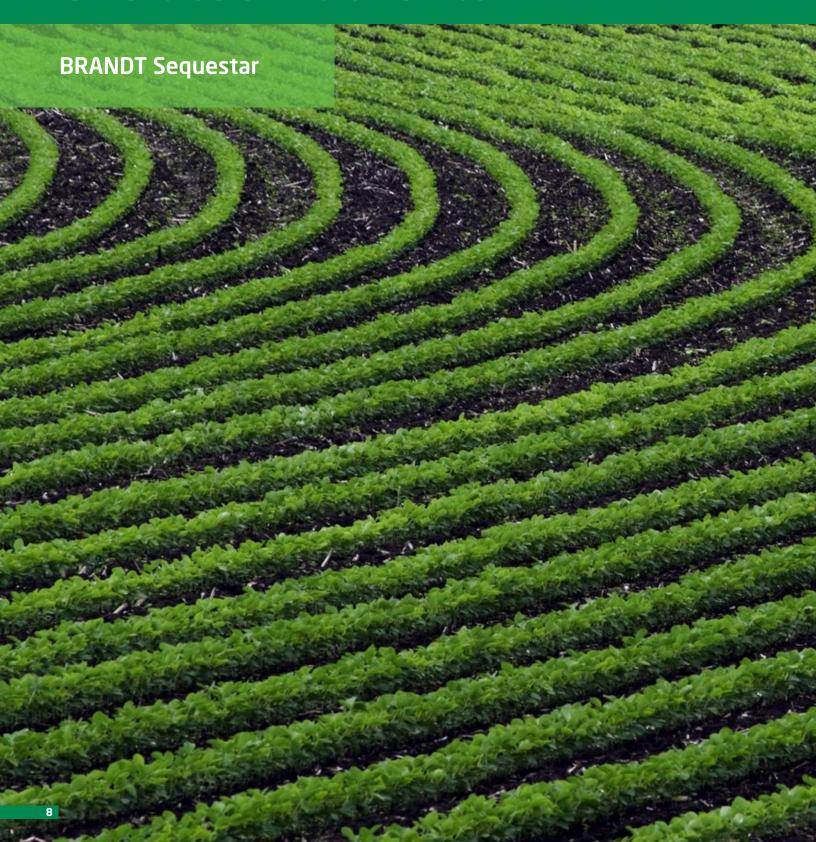
Derived from: Zinc Nitrate, Urea

N-Boron®

5-0-0 5.0% N 3.3% B

Derived from: Urea, Sodium Borate

Chelated Nutrients



BRANDT Sequestar®

Chelated Nutrients

BRANDT Sequestar delivers high quality, fully chelated EDTA, EDDHA and DTPA micronutrients to the plant in an immediately available form. BRANDT Sequestar formulations can be mixed directly into growing media, applied as a soil drench or added to fertigation systems. They are also compatible with most fertilizers and pesticides.

Dry Microgranule Formulations

BRANDT Sequestar 9% Ca

9.0% Ca

Derived from: calcium ethylenediaminetetraacetate

BRANDT Sequestar 14% Cu

14.0% Cu

Derived from: copper ethylenediaminetetraacetate

BRANDT Sequestar 6% Fe EDDHA

6.0% Fe

Derived from: ferric ethylenediamine-di-(o-hydroxyphenyl-acetate)

BRANDT Sequestar 7% Fe DTPA

7.0% Fe

Derived from: iron diethylenetriaminepentaacetate

BRANDT Sequestar 11% Fe DTPA

11.0% Fe

Derived from: iron diethylenetriaminepentaacetate

BRANDT Sequestar 13.2% Fe

13.2% Fe

Derived from: iron ethylenediaminetetraacetate

BRANDT Sequestar 5.5% Mg

5.5% Mg

 $Derived\ from: magnesium\ ethylenediaminete traacetate$

BRANDT Sequestar 13% Mn

13.0% Mn

Derived from: manganese ethylenediaminetetraacetate

BRANDT Sequestar 14% Zn

14.0% Zn

Derived from: zinc ethylenediaminetetraacetate

Liquid Formulations

BRANDT Sequestar 3% Ca

3.0% Ca

Derived from: calcium ethylenediaminetetraacetate

BRANDT Sequestar 7.5% Cu

7.5% Cu

Derived from: copper ethylenediaminetetraacetate

BRANDT Sequestar 4.5% Fe EDTA

4.5% Fe

Derived from: iron ethylenediaminetetraacetate

BRANDT Sequestar 2.5% Mg

2.5% Mg

Derived from: magnesium ethylenediaminetetraacetate

BRANDT Sequestar 6% Mn

6.0% Mn

Derived from: manganese ethylenediaminetetraacetate

BRANDT Sequestar 9% Zn

9.0% Zn

Derived from: zinc ethylenediaminetetraacetate

BRANDT Sequestar Corn Mix

0.5% Cu | 0.5% Mn | 4.5% Zn

Derived from: copper ethylenediaminetetraacetate (EDTA), manganese EDTA and zinc EDTA

BRANDT Sequestar Soybean Mix

0.65% Mg | 0.5% Fe | 2.25% Mn | 1.25% Zn

Derived from: magnesium ethylenediaminetetraacetate (EDTA), iron EDTA, manganese EDTA and zinc EDTA

Complexed Nutrients



Agra Sol

Dry Lignosulfonates

Agra Sol dry soluble powder chelated micronutrients are the most economical way to supply micronutrients to plants and turf. They mix easily with water and can be applied alone, with non-phosphorus liquid fertilizers or added to dry granular fertilizers.

Agra Sol Iron-15

15.0% Fe

Derived from: Iron Lignosulfonate

Agra Sol Manganese

15.0% Mn

Derived from: Manganese Lignosulfonate

Agra Sol Micro Mix

5.0% Mg | 0.5% B | 1.5% Cu | 4.0% Fe | 4.0% Mn | 0.1% Mo | 1.5% Zn

Derived from: Magnesium Lignosulfonate, Sodium Borate, Copper Lignosulfonate, Iron Lignosulfonate, Manganese Lignosulfonate, Sodium Molybdate, Zinc Lignosulfonate

Agra Sol Vegetable Mix

3.0% Mg | 0.3% B | 7.0% Fe | 1.2% Mn | 0.006% Mo | 1.2% Zn

Derived from: Magnesium Lignosulfonate, Sodium Borate, Iron Lignosulfonate, Manganese Lignosulfonate, Sodium Molybdate, Zinc Lignosulfonate

Agra Sol Zinc-Manganese-Iron

6.0% Zn | 6.0% Mn | 3.0% Fe

Derived from: Iron Lignosulfonate, Manganese Lignosulfonate, Zinc Lignosulfonate

Agra Sol Zinc Manganese Iron Extra

6.0% Zn | 6.0% Mn | 3.0% Fe

Humic/Fulvic Acid | Ascophyllum nodosum

Derived from: Iron Lignosulfonate, Manganese Lignosulfonate, Zinc Lignosulfonate





BRANDT GH

Liquid Glucoheptonates

BRANDT GH liquid glucoheptonates are naturally derived, biodegradable complexed micronutrients. They contain natural sugars that help formulations adhere to the plant, which makes BRANDT GH especially effective as a foliar application. BRANDT GH formulations mix easily with water and may also be used through fertigation or used as a soil application. BRANDT GH formulations are compatible with most pesticides and non-phosphate based fertilizers.

BRANDT GH Cal-N

8-0-0 8.0% N 8.0% Ca

Derived from: Urea and Calcium Nitrate

BRANDT GH Copper

5.0% Cu

Derived from: Copper Sulfate

BRANDT GH Iron

5.0% Fe

Derived from: Iron Sulfate

BRANDT GH Magnesium

Derived from: Magnesium Nitrate

BRANDT GH Manganese

5.0% Mn

Derived from: Manganese Sulfate

BRANDT GH Molybdenum

5.0% Mo

Derived from: Molybdenum Nitrate

BRANDT GH Zinc

7.0% Zn

Derived from: Zinc Sulfate

BRANDT Premium Liquid Fertilizers

BRANDT 30-K

0-0-30 30.0% K₂0

Derived from: Potassium Carbonate

BRANDT 4-0-8

Derived from: Potassium Nitrate, Calcium Nitrate, Manganese Glucoheptonate, Sodium Borate, Zinc Glucoheptonate, Copper Glucoheptonate and Sodium Molybdate

BRANDT Liquid Boron

10.0% B

Derived from: Boron Ethanolamine

BRANDT Sulfur

12-0-0 12.0% N 26.0% S

Derived from: Ammonium Thiosulfate

BRANDT Mag Nitrate

7-0-0 7.0% N 6.0% Mg

Derived from: Magnesium Nitrate

BRANDT Nurture® CRN 30-0-0

30-0-0 Slow Release Nitrogen

Derived from: Urea and Methylene Diurea

*Controlled Release Nitrogen from Methylene Diurea



BRANDT iHammer

Liquid Nutrients

BRANDT iHammer is a joint venture focused on new product technologies that help plants use water and nutrients more efficiently, enhance photosynthesis and boost sugar utilization.

Clear Advantage®

5-0-1 0.05% B 0.75% Mn 0.001% Mo 0.075% Zn

Derived from: Potassium Nitrate, Urea, Sodium Borate, Manganese EDTA, Sodium Molybdate and Zinc EDTA

ADVANTAGE is a patented liquid foliar fertilizer that builds healthy vibrant plants and provides the right amount of N, K, B, Mn, Mo and Zn for optimal plant health.

Nutrient Efficiency Enhancers



BRANDT Reaction®

Nutrient Efficiency Enhancers

Get More from Your Nutrient Investment

BRANDT Reaction is a unique line of soil applied nutrients with a patented technology that delays the chemical fixation of phosphorus and potassium with other nutrients or elements in the soil, and keeps them available in the soil solution for up to 26 weeks. This in turn, promotes better nutrient availability, uptake and utilization. It is especially useful in high alkaline, calcareous and acidic soils; and can withstand most hostile soil and water conditions.

Key Advantages of BRANDT Reaction Technology:

- Enhances the efficiency of applied phosphorus and potassium alone
- Excellent compatibility with other nutrients, including nitrates
- Superior mix ability and minimal residue
- Ideal for planter band applications and irrigation systems
- Improved crop health, quality and yield

Liquid Nutrient Efficiency Enhancers

BRANDT Reaction 2-9-6 LS

2-9-6 2.0% N 9.0% P₂O₅ 6.0% K₂O 1.0% S

Derived from: Monoammonium Phosphate, Potassium Nitrate and Potassium Sulfate

BRANDT Reaction K LS

1-0-7 1.0% N 7.0% K₂0 1.0% S

Derived from: Potassium Nitrate, Potassium Sulfate and Muriate of Potash

BRANDT Reaction MKS

0-0-4 4.0% K₂0 2.1% Mg 4.2% S

Derived from: Potassium Magnesium Sulfate complexed with amino acid

BRANDT Reaction P LS

2-14-0 2.0% N 14.0% P₂O₅

Derived from: Monoammonium phosphate



Dry Nutrient Efficiency Enhancers

BRANDT Reaction P DS

12-58-0 12.0% N 58.0% P₂O₅

Derived from: Monoammonium Phosphate

BRANDT Reaction K DS

5-0-49 5.0% N 49.0% K₂O 8.0% S

Derived from: Potassium Nitrate, Potassium Sulfate and Muriate Of Potash

BRANDT Reaction S DS

21-0-0 21.0% N 23.0% N

Derived from: Ammonium Sulfate and Urea



N-Boost® 5

Get More from Your Nitrogen Investment

N-Boost 5 is a patented foliar nitrogen supplement formulated with a sugarcane fermentation extract. The naturally derived formulation helps boost plant nutrient uptake and utilization, for better return on nutrient investment. It also helps reduce nutrient leaching. N-Boost 5 is an excellent option for crops with high nutrient demand and needs.

N-Boost 5

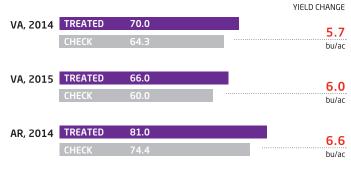
5-0-0 5.0% N

Derived from: Urea

N-Boost on Corn - 32 oz/ac, applied at V5

IL, 2013	TREATED	276.7	17 6
	CHECK	259.2	17.5 bu/ac
			_
VA, 2014	TREATED	147	14.3
	CHECK	132.7	bu/ac

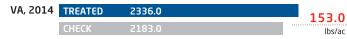
N-Boost on Soybeans - 64 oz/ac, applied at R2



N-Boost on Cotton - 32 oz/ac, applied at Early Bloom

YIELD CHANGE

VIELD CHANCE



N-Boost on Bermuda Grass Hay - 48 oz/ac

YIELD CHANGE	YIELD CHAN					
1.0		2.0	TREATED	TN, 2013		
1.0						
tons/a		1.0	CHECK			

Botanical Blends

BRANDT Bio-Master®

1.5% Mg | 4.0% S | 0.16% B | 3.5% Fe | 0.75% Mn | 0.003% Mo | 0.75% Zn

Derived from: magnesium sulfate, sodium tetraborate, ferric ammonium EDTA, ferrous sulfate, manganese sulfate, sodium molybdate, zinc sulfate

BRANDT BIO-MASTER is a concentrated liquid plant food containing secondary elements and a robust micronutrient package, as well as seaweed extract and humic acid. The formulation provides a natural source of plant vitamins, enzymes, proteins, cytokinins, auxins, organic acids and amino acids. It also supplies organic matter in a concentrated and convenient liquid form.

BRANDT Plant Start 8-27-2

8-27-2 8.0% N 27.0% P₂O₅ 2.0% K₂O

Derived from: Ammonium Polyphosphate, Potassium Phosphate BRANDT Plant Start is a concentrated liquid plant food formulated with seaweed extract to promote early growth and healthy root systems. This product is recommended for use as a supplement to a well balanced fertilizer program and is not meant to be a substitute for good cultural practices.

BRANDT Seaweed Max

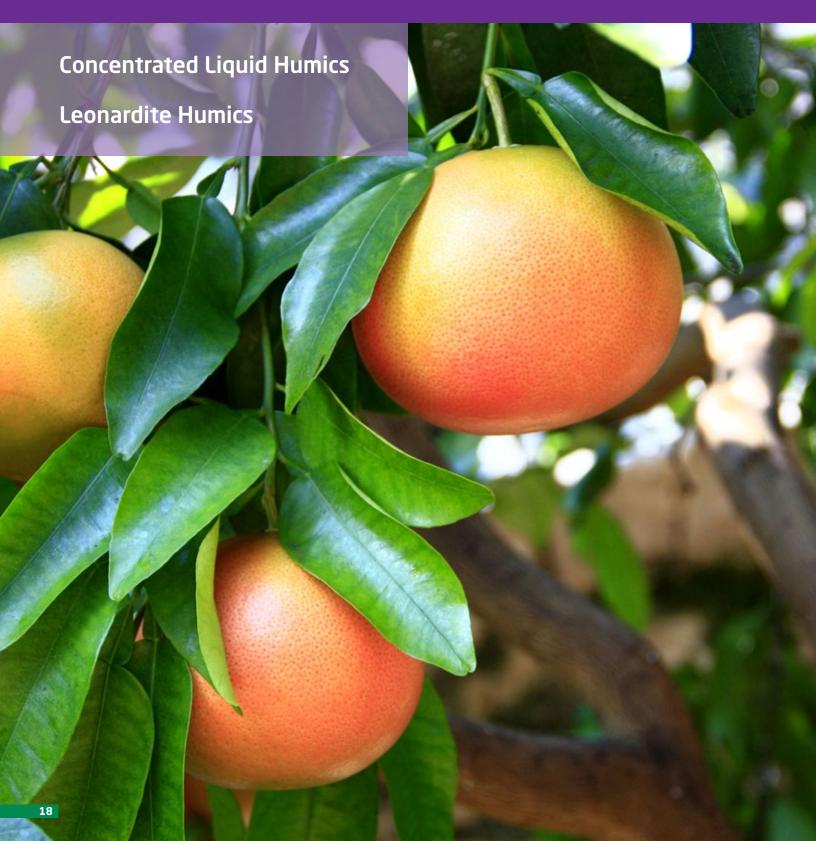
25.0% Seaweed Extract 1.0% Humic Acid

Derived from: Ascophyllum Nosodum, Leonardite

A 25% seaweed concentrate with humic acid added. Stimulates microbial activity, promotes early season root growth and helps establish overseed. Humates increase water holding capacity of soil, making treated soils more drought resistant, and acts as a natural chelating agent to make nutrients more available. Not for use on food crops.



Humic Acid Soil Amendments



Concentrated Liquid Humics

BRANDT Uptake 12

12.0% Humic Acid

Derived from: Leonardite

BRANDT Uptake 12 is an alkaline 12% humic acid liquid that supplies organic matter in convenient, ready-to-use form. May be applied as a foliar, deep root injection or in fertigation.

BRANDT Uptake Advanced

6.0% Humic Acid

Derived from: Leonardite Ore

BRANDT Uptake Advanced is a non-alkaline, 6% humic acid liquid that supplies organic matter to plants and turf in a convenient, ready-to-use form. It is one of the only humics that is truly acidic, which makes it compatible with most adjuvants, pesticides and fertilizers including 4-0-8, phosphoric acid, UAN solutions, and non-chelated micronutrients, including iron. May be applied as a foliar or through fertigation.

BRANDT Uptake Starter

4-0-1 4.0% N 1.0% K₂O 4.0% S 10.0% Humic Acid

Derived from: Ammonium Sulfate, Potassium Hydroxide, Leonardite Ore BRANDT Uptake Starter is a highly charged, modified humic acid liquid that supplies organic matter in a convenient, ready-to-use form. It is designed for use with starter fertilizer solutions, including high phosphate solutions, such as 11-37-0.



Leonardite Humics

Leonardite Plus Granular - OMRI Listed

65.0% Humic Acid

Derived from: Leonardite

Leonardite Plus Granular is an 65% humic acid granular that is designed to be mixed with dry granular fertilizers, soil amendments, potting soil or any other bulk substrate that is already being applied. Approved for organic production.

Leonardite Plus Fine[™]

A Minimum of 80.0% Humic Acid

Derived from: Leonardite

Leonardite Plus Fine is an ultra concentrated, extremely pure 80% humate. It supplies organic matter in a readily available and cost-effective dry powder form. Improves plant health and vigor, root systems and green.

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