


Turfgrass Solutions for Canada

- Nutrition
- Adjuvants
- Pond Dyes
- Colorants
- Utility Products



GROWING THE EXTRA MILE with our budding line of turf and ornamental solutions

BRANDT is a leading manufacturer of specialty inputs for the agriculture, turf and ornamental, and lawn and garden markets. The company has been at the forefront of plant health since 1953 and offers one of the largest selections of liquid micronutrients. The company also offers adjuvants, and colorants to fit every budget and need.



Contents

High Performance Foliar Nutrients	2
Foliar Nutrients	4
Specialty Liquid Nutrients	7
Humic/Seaweed Specialty Nutritionals	8
Adjuvants.	8
Utility Products	9
Water Treatment	9
Nutrition Kits and Programs	10
Product Compatibility Chart	12
Liquid Nutrient Analysis Guide	13



Scan to see how
BRANDT Manni-Plex works



BRANDT™ Manni-Plex™ High Performance Foliar Nutrients

BRANDT Manni-Plex delivers the right nutrients, in the right form which allows for maximum turf health. Unlike other nutrient forms, the nutrient elements in BRANDT Manni-Plex formulations are complexed with sugar alcohol. The proprietary complex has a very small molecular size and shape, which allows BRANDT Manni-Plex to enter the plant through small stomata and transcuticular pores on the leaf surface and helps get more nutrients into the turfgrass.

Once BRANDT Manni-Plex nutrients are inside the plant, they move quickly and freely through the phloem to the plant growth areas. This allows the plant to fully utilize the applied nutrients, which results in improved plant health and turfgrass quality.

The correlation of sugar alcohol complexes and nutrient mobility within plants have been validated in University studies. Research showed that plants that were rich in sugar alcohol complexes, such as mannitol, had better distribution of nutrients such as boron from leaves through the phloem and a higher accumulation in fruit tissues. UC Davis.

Key Benefits

- Formulated with a sugar alcohol complex, which turfgrass views as a natural source
- Small molecular size and shape improves nutrient absorption
- Nutrients support plant physiological processes including growth, development and response to environmental stress
- Proprietary formulation coats leaves and adheres to the leaf surface, making it available to the plant longer
- Compatible with most insecticides, fungicides and PGRs
- May also be used in fertigation

BRANDT™ Foli-Cal™

5-0-0 10.0% Ca

Derived from calcium acetate, calcium nitrate

BRANDT Manni-Plex Eagle

7-0-14 0.5% Fe 0.25% Mn

Derived from urea, potassium carbonate, iron EDTA and manganese EDTA

BRANDT Manni-Plex Grow

12-0-6 0.25% Cu 0.5% Fe 0.25% Mn

Derived from potassium nitrate, urea, copper EDTA, iron EDTA and manganese EDTA

BRANDT Manni-Plex Mg

5-0-0 4.0% Mg

Derived from magnesium nitrate, urea

BRANDT Manni-Plex Mn

7-0-0 5.0% Mn

Derived from manganese nitrate, urea

BRANDT Manni-Plex Root Builder

3-0-0 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

BRANDT Manni-Plex Total Turf

5-0-0 1.2% Mg 2.85% Fe 0.45% Mn 0.65% Zn

Derived from magnesium nitrate, iron nitrate, manganese nitrate, zinc nitrate and urea

BRANDT Manni-Plex Ultra Turf

4-0-2 0.5% Mg 0.25% B 0.5% Cu 2.0% Fe
0.5% Mn 0.25% Mo

Derived from urea ammonium nitrate, potassium nitrate, magnesium nitrate, copper nitrate, iron nitrate, manganese nitrate, sodium borate and sodium molybdate



BRANDT iHammer

Foliar Nutrients

BRANDT iHammer is a joint venture between BRANDT and Innovation Hammer, LLC. The company's mission and tagline, Innovation Without Boundaries, reflects the company's focus on plant health research and technology.

BRANDT iHammer is led by Mike McBride, President, and Dr. Arthur Nonomura, Chief Science Officer. Mike has over 35 years of experience in the turf industry. Dr. Nonomura and the late Dr. Andrew A. Benson spent decades conducting plant health research at the University of California that led to the discovery of the relationship of plant nutrition to glycoregulation.

One of the most highly renowned scientists of the 20th century, Dr. Benson was a world leader in the field of photosynthesis. Both Dr. Nonomura's and Dr. Benson's works in carbon fixation, plant lectin cycle, and plant energy production have been published in many prestigious science journals, including the Journal of Plant Nutrition.

Through this joint venture, BRANDT iHammer has been able to manufacture and commercialize new plant health technologies to improve fertility, photosynthesis, carbohydrate content and energy flow. These technologies give course managers new products that maximize plant health and minimize plant stress during periods of adverse environmental conditions and abiotic stress.



BRANDT iHammer: Patented Glycoregulator Technology

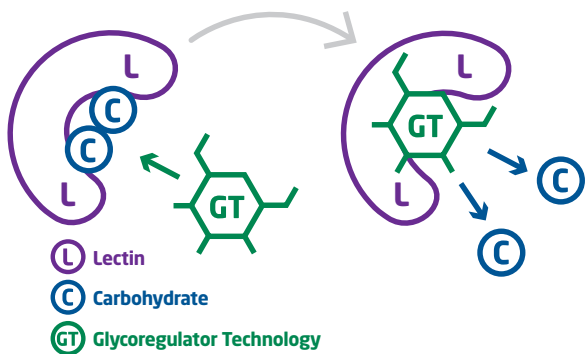
The science behind BRANDT iHammer is based on glycoregulation in the field. BRANDT iHammer added the nutritional interaction of carbohydrates in the Plant Lectin Cycle to the grower's tool chest.

Lectins have an affinity to bind carbohydrates and we saw that was a problem because it made energy-packed nutrition unavailable to the plant for photosynthesis and metabolism.

BRANDT iHammer's technology solves this issue, by preventing lectins from binding those carbs. BRANDT iHammer formulations "unlock and release" carbs off of lectins. Now, the plant is able to access more carbohydrates for use in key life processes.

The end result is our glycoregulator technology that makes more nutrition and energy available to stimulate root and top growth, while keeping turf resilient under environmental stress conditions.

BRANDT iHammer Unlocks and Releases Carbs



BRANDT iHammer Increases Nutritive Energy Flow to Photosynthesis and Respiration



BRANDT iHammer Formulations

Three formulations are currently available for turf and ornamentals.

- They contain patented glycoregulator technology
- Feature high quality, stable and readily available nutrients
- Are compatible with most fertilizers, pesticides and adjuvants

MegAleX™

3-0-0

Derived from urea

Recommended for golf greens to give turf extra support from heavy foot traffic and play. Helps build vibrant, high performance turf, encourages root growth and promotes vigor in shade areas. For flowering ornamentals, this formula encourages bud and bloom. Provides a stable, readily available source of nitrogen that resists soil tie up. Does not contain phosphate. Advances fertility.

Advantage™

5-0-1

0.05% B

0.75% Mn

0.001% Mo

0.75% Zn

Derived from potassium nitrate, urea, sodium borate, manganese EDTA, sodium molybdate and zinc EDTA

Recommended for all golf turf areas, sports turf, landscape and ornamentals. Contains a robust nutrient package to correct deficiencies and improve turf health. Advances fertility.

Upplause™ Plus

10-0-0

Derived from ammonium sulfate and urea

Recommended for fairways, sports turf, and landscaping. Contains a stable, readily available source of nitrogen that resists soil tie up and helps build strong, vibrant turf that can stand up to environmental stress. Excellent for turf establishment and turf strength. Advances fertility.

BRANDT™
iHammer
Innovation Without Boundaries™



BRANDT Converge

Nutrition with Nitamin™

Extended Release

BRANDT Converge formulations contain Nitamin, a targeted foliar nitrogen and patented liquid nutrient source. It is designed to make some nitrogen immediately available, while reserving the rest to provide a steady supply of nitrogen.

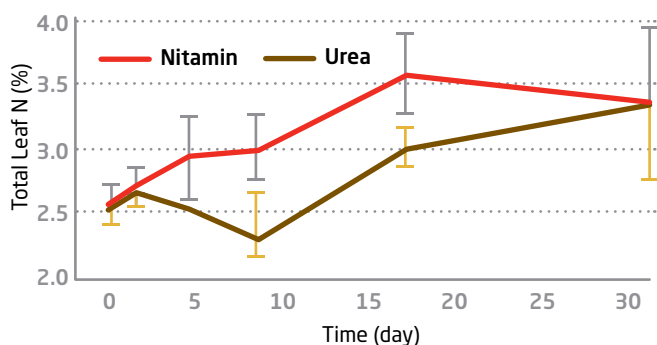


Key Benefits

- Nitamin is applied directly to the leaf surface for rapid absorption and green-up
- Low salt index and low levels of ammonia and biuret, it is a safe fertilizer solution
- Due to its high N concentration, it stays soluble longer - delivering enhanced foliar uptake over an extended period of time
- Compatible with a wide range of micronutrients and plant protection chemicals

Enhanced Nitrogen Uptake

Source: University of Florida, Dr. Gene Albrigo, Dr. James Syvertsen



BRANDT Converge SRN 18-0-6

18-0-6 0.05% Cu 0.1% Fe 0.05% Mn 0.05% Zn

Derived from potassium nitrate, triazone, methylene urea, urea, copper EDTA, iron EDTA, manganese EDTA and zinc EDTA

- 5.4% slowly available nitrogen from triazone and methylene urea

Contains slowly available nitrogen and a fully chelated micronutrient package. Provides quick greening without rapid top growth. Nitrogen promotes consistent turfgrass shoot growth.

BRANDT Converge SRN 18-3-6

18-3-6 0.05% Cu 0.1% Fe 0.05% Mn 0.05% Zn

Derived from triazone, methylene urea, urea, potassium nitrate, potassium polyphosphate, copper EDTA, iron EDTA, manganese EDTA and zinc EDTA

- 5.4% slowly available nitrogen from triazone and methylene urea

Contains slowly available nitrogen and a fully chelated micronutrient package. Provides quick greening without rapid top growth. Nitrogen promotes consistent turfgrass shoot growth.

BRANDT Converge SRN 30-0-0

30-0-0

Derived from triazone, methylene urea and urea

- 18% slowly available nitrogen from triazone and methylene urea

Contains slowly available nitrogen. Promotes root development and turf vigor. Nitrogen promotes consistent turfgrass shoot growth.

BRANDT Converge 12-0-12

12-0-12

Derived from urea, methylene urea, triazone, potassium carbonate, iron EDTA and manganese EDTA

- 5.4% slowly available nitrogen from triazone and methylene urea

Contains two forms of nitrogen: a readily available component which provides quick green-up and a controlled-release component which ensures a consistent and steady delivery that resists leaching.

Specialty Liquid Nutrients

BRANDT 20-K

2-0-20

Derived from urea, potassium acetate

20% liquid potassium fertilizer. Potassium promotes root growth and impacts plant response to stress.

BRANDT Flash Dance

1-0-0 5.0% Fe

Derived from urea, ferrous sulfate

5% liquid iron supplement with penetrants that enhance uptake. Iron improves turf color and provides quick green up. It is especially useful before tournament play.

BRANDT MKS

0-0-4 2.1% Mg 3.2% S

Derived from sulfate of potash magnesia

Specialty liquid fertilizer that delivers highly available and efficient Mg, K and S to correct nutrient deficiencies. Improves turf strength, vigor and color (by supplying Mg, which is essential to chlorophyll production).

BRANDT Supreme Green

12-0-0 0.5% Mg 4.0% S 5.0% Fe 1.0% Mn

Derived from urea, magnesium sulfate, ferrous sulfate and manganese sulfate

Contains 12% liquid nitrogen and a micronutrient package. Improves turf vigor. Nitrogen promotes consistent turfgrass shoot growth. Compatible with most fertilizers.

BRANDT™ Uptake™ 12

0-0-3

Derived from potassium hydroxide

ALSO CONTAINS NONPLANT FOOD INGREDIENT:

12% humic acid derived from leonardite. Humic acid analyzed by acid precipitation method.

12% liquid humic acid formulation with a spike of nitrogen. Supplies organic matter in a convenient, ready-to-use form. May be used on warm and cool season turfgrass. May be applied as a foliar or through fertigation.

BRANDT Uptake Advanced

6.0% Humic Acid Derived from Leonardite Ore

6% liquid humic acid. Supplies organic matter in a convenient, ready-to-use form. 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.





Humic/Seaweed Specialty Nutritionals

BRANDT In-Cyte

3-12-1

Derived from ammonium polyphosphate, potassium citrate and kelp (*Ascophyllum nodosum*)

12% liquid with sea plant extract derived from *Ascophyllum nodosum*.

BRANDT Parco-Root XL

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 borate, iron EDTA, ferrous sulfate, manganese sulfate, sodium molybdate, and zinc sulfate

Multi-nutrient formulation packed with micronutrients to improve turf strength and support root growth. May be used as a foliar or soil application.

BRANDT Seaweed Max

25.0% Seaweed Extract

Concentrated formulation contains 25% seaweed extract derived from *Ascophyllum nodosum*. An important product to enhance plant tolerance and recovery from abiotic stress, resulting in better establishment and overall vigor.

Pond Dyes

BRANDT™ Blue Lagoon™

The flagship of BRANDT aquatic colorants. Provides a nice, even shade of blue throughout the body of water. Available in regular strength, super strength (SS) and water-soluble bags (WSB).

BRANDT Blue Shadow SS

Blue green super strength colorant. Creates a deep aquamarine color in lakes, ponds and fountains. Imparts a pleasant shade reminiscent of the deep waters of the Caribbean.

BRANDT™ Loch Ness™ SS

Super strength black colorant. Has a rich deep, dark and clean appearance. Popular in landscapes because of the mirror effect it creates.

BRANDT Midnight Blue SS

Super strength blue/black colorant. Gives ponds, lakes, fountains and lagoons a unique deep water hue.

Spray Pattern Indicators

BRANDT™ Big Foot™ Blue

Blue colorant and temporary spray pattern indicator. Used on turf, landscape and non-crop use sites. *Also available in a super strength concentrate (BRANDT Big Foot SS) and water soluble bags (BRANDT Big Foot WSB).*

BRANDT Big Foot Foamy

Foam spray marker helps reduce spray overlaps and gaps in spray applications. Produces highly visible white foam that marks the outside edge of a spray swath. Can be used with any boom or ground sprayer application.

BRANDT Big Foot Green SS

Green "super strength" spray pattern indicator and hydroseeding colorant. Ideal for temporary color touch ups on golf courses. Only available in a super strength concentrate.

BRANDT Big Foot Red SS

Concentrated red colorant and temporary spray pattern indicator. Used with herbicides and fertilizers. Designed to replace rhodamine red dyes.





BRANDT pre-packaged kits offer a complete greens nutrition for each season. They contain a carefully selected mix of BRANDT nutritionals that help maintain turf strength and vigor during tough summer and winter conditions.

Fertilizing Greens Has Never Been Easier



Scan to learn more about BRANDT turf solutions



BRANDT Manni-Plex Foliar Nutrients

BRANDT has been an innovator in foliar nutrition for over 65 years. The company's flagship line of foliar nutrients, BRANDT Manni-Plex, is the pillar of BRANDT greens nutrition kits. The proprietary chemistry maximizes nutrient uptake, mobility and efficacy. It is an excellent tool for correcting nutrient deficiencies and maintaining turf vigor throughout the seasons.

Bi-Monthly Success Kit - For 2x/Month Application

1 kit treats 3 acres for 6 months.

Bi-Monthly Success Kits deliver 0.25 lbs of N + 0.13 lbs of K per month

Application Timing	Product	Application Rate	Cases
Week 1	BRANDT Foli-Cal	3 fl oz / 1,000 sq ft	4
	BRANDT Manni-Plex Grow <i>12-0-6, 0.25% Cu, 0.5% Fe, 0.25% Mn</i>	3 fl oz / 1,000 sq ft	4
	BRANDT Parco-Root XL <i>Multi-nutrient formulation loaded with micronutrients</i>	3 fl oz / 1,000 sq ft	4
	BRANDT Converge SRN 30-0-0	6 fl oz / 1,000 sq ft	6
<i>Month 6 only, no application of BRANDT Converge SRN 30-0-0 on week 1</i>			
Week 2	BRANDT Converge SRN 18-0-6 <i>18-0-6, 0.05% Cu, 0.10% Fe, 0.05% Mn, 0.05% Zn</i>	3 fl oz / 1,000 sq ft	4
	BRANDT 20-K <i>2-0-20</i>	3 fl oz / 1,000 sq ft	4
	BRANDT Seaweed Max	3 fl oz / 1,000 sq ft	4
	BRANDT MKS <i>0-0-4, 2.1% Mg, 3.2% S</i>	1 case/month	6

Summer Success Kit - For Weekly Application

**1 kit treats 3 acres
for 1 month.**

*Summer Success Kits
deliver 0.25 lbs of N +
0.13 lbs of K per month*

Application Timing	Product	Application Rate	Cases
Week 1	BRANDT Manni-Plex Total Turf <i>5-0-0, 1.2% Mg, 2.85% Fe, 0.45% Mn, 0.65% Zn</i>	3 fl oz /1,000 sq ft	1
	BRANDT Manni-Plex Mg <i>5-0-0, 4% Mg</i>	3 fl oz /1,000 sq ft	1
	BRANDT Converge SRN 30-0-0 <i>30-0-0</i>	3 fl oz /1,000 sq ft	2
Week 2	BRANDT Foli-Cal <i>5-0-0, 10% Ca</i>	3 fl oz /1,000 sq ft	2
	BRANDT Manni-Plex Eagle <i>7-0-14, 0.5% Fe, 0.25% Mn</i>	3 fl oz /1,000 sq ft	1
	BRANDT In-Cyte <i>3-12-1 enriched with Seaweed Extract from Ascophyllum nodosum</i>	3 fl oz /1,000 sq ft	1
Week 3	BRANDT Foli-Cal	3 fl oz /1,000 sq ft	1
	BRANDT Manni-Plex Root Builder <i>3-0-0, 0.5% Mg, 0.2% B, 0.05% Cu, 0.9% Mn, 4.7% Zn</i>	3 fl oz /1,000 sq ft	
	BRANDT Converge SRN 30-0-0	3 fl oz /1,000 sq ft	
Week 4	BRANDT Foli-Cal	3 fl oz /1,000 sq ft	1
	BRANDT Manni-Plex Mn <i>7-0-0, 5% Mn</i>	3 fl oz /1,000 sq ft	
	BRANDT Manni-Plex Ultra Turf <i>4-0-2, 0.5% Mg, 0.25% B, 0.5% Cu, 2% Fe, 0.5% Mn, 0.25% Mo</i>	3 fl oz /1,000 sq ft	
Every 3rd Spray	BRANDT Seaweed Max <i>25% Seaweed Extract derived from Ascophyllum nodosum</i>	1.5 fl oz /1,000sqft	1



BRANDT Product Compatibility Chart

- Compatible
- Jar test is recommended. Depends on water volume, concentrations, final solution pH, etc.
- Not Compatible

BRANDT Manni-Plex Foliar Nutrients								Other BRANDT Products											
BRANDT Foli-Cal	BRANDT Manni-Plex Eagle	BRANDT Manni-Plex Grow	BRANDT Manni-Plex Mg	BRANDT Manni-Plex Mn	BRANDT Manni-Plex Root Builder	BRANDT Manni-Plex Total Turf	BRANDT Manni-Plex Ultra Turf	BRANDT 20-K	BRANDT Converge SRN 12-0-12	BRANDT Converge SRN 18-0-6	BRANDT Converge SRN 18-3-6	BRANDT Converge SRN 30-0-0	BRANDT Supreme Green	BRANDT Flash Dance	BRANDT In-Cyte	BRANDT Parco-Root XL	BRANDT Uptake 12	BRANDT Uptake Advanced	BRANDT Seaweed Max

BRANDT Manni-Plex Foliar Nutrients																			
BRANDT Foli-Cal	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Manni-Plex Eagle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Manni-Plex Grow	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Manni-Plex Mg	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Manni-Plex Mn	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Manni-Plex Root Builder	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Manni-Plex Total Turf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Manni-Plex Ultra Turf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Other BRANDT Products																			
BRANDT 20-K	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Converge SRN 12-0-12	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Converge SRN 18-0-6	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Converge SRN 18-3-6	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Converge SRN 30-0-0	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Supreme Green	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Flash Dance	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT In-Cyte	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Parco-Root XL	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Uptake 12	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Uptake Advanced	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
BRANDT Seaweed Max	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

BRANDT Liquid Nutrient Analysis Guide

Product	N	P	K	B	Ca	Cu	Fe	Mg	Mn	Mo	S	Zn
BRANDT Foli-Cal	5%				10%							
BRANDT Manni-Plex Eagle	7%		14%				0.5%		0.25%			
BRANDT Manni-Plex Fe	5%						5%					
BRANDT Manni-Plex Grow	12%		6%			0.25%	0.50%		0.25%			2%
BRANDT Manni-Plex Mg	5%							4%				
BRANDT Manni-Plex Mn	7%								5%			
BRANDT Manni-Plex Root Builder	3%			0.20%		0.05%		0.50%	0.90%			4.70%
BRANDT Manni-Plex Total Turf	5%						2.85%	1.20%	0.45%			0.65%
BRANDT Manni-Plex Ultra Turf	4%		2%	0.25%		0.50%	2%	0.50%	0.50%	0.25%		
BRANDT 20-K	2%		20%									
BRANDT 30-K			30%									
BRANDT Converge SRN 12-0-12	12%		12%				0.5%		0.4%			
BRANDT Converge SRN 18-0-6	18%		6%			0.05%	0.10%		0.05%			0.05%
BRANDT Converge SRN 18-3-6	18%	3%	6%			0.05%	0.10%		0.05%			0.05%
BRANDT Converge SRN 30-0-0	30%											
BRANDT Flash Dance	1%						5%					
BRANDT In-Cyte	3%	12%	1%									
BRANDT MKS			4%					2.1%			3.2%	
BRANDT Parco-Root XL				0.16%			3.50%	1.50%	0.75%	0.003%	4%	0.75%
BRANDT Supreme Green	12%						5%	0.50%	1%		4%	
BRANDT Uptake 12			3%									

These products may only be sold in states where registered or where registration is not required. For information regarding product availability in your area, please contact Brandt Consolidated, Inc. licensees, who may or may not be affiliated with, connected to, or sponsored by Brandt Consolidated, Inc.

The marks BRANDT, Big Foot, Blue Lagoon, Foli-Cal, Indicate 5, Innovation without Boundaries, Loch Ness, Manni-Plex and Uptake are U.S. registered trademarks of Brandt Consolidated, Inc. All other trademarks, product names and company names that appear on this document are the property of their respective owners or licensees, who may or may not be affiliated with, connected to, or sponsored by Brandt Consolidated, Inc.

Brandt Consolidated, Inc.
2935 South Koke Mill Road
Springfield, Illinois 62711 USA
800 300 6559
217 547 5840

3654 South Willow Avenue
Fresno, California 93725 USA
559 499 2100

Visit us online at:
www.BRANDT.co

BRANDT Product Finder App



BRANDT™