PREMIER TECH

AGTIV®

DESIGNED BY NATURE. PERFECTED BY SCIENCE.

2024 · 2025

PROFESSIONAL INOCULANTS CATALOG

PREMIER TECH 100

100 YEARS, AND BEYOND

Premier Tech is a leader in the innovation of quality reliable inoculants for landscaping, nursery, turf, fruit and vegetable crops. Thanks to its numerous manufacturing facilities and vast distribution network, products are offered from coast to coast, throughout North America.

With tomorrow in mind, Premier Tech is 100 years young and always making a difference with passion.

40 years
OF EXPERTISE IN ACTIVE INGREDIENTS

Backed by 40 years of expertise in biological active ingredients, Premier Tech masters a unique large-scale manufacturing process in aseptic laboratories that meets the highest quality control standards, allowing you to fully benefit from its proven consistency of viable spores, no contamination, and reliable active ingredients. It's how we make a difference.

AGTIV®

DESIGNED BY NATURE.
PERFECTED BY SCIENCE.

Born from nature and perfected by science, AGTIV® is an innovative technology brand of high-quality and proven natural active ingredients that deliver superior performance.

Providing reliable, ready-to-use inoculants for crop production, plant installation or establishment, and making our customers benefit from these technologies is our goal.

MYCORRHIZAL INOCULANTS DESIGNED FOR PROFESSIONALS

	USAGE								
	FOR ORGANIC USE	INTO GROWING MEDIA	TRANSPLANTING	MIXING WITH SEEDS	SOIL INJECTION	ROOT DIPPING	HYDROSEEDING	SPREADING	FORMULATION
LANDSCAPING & NURSERIES									
AGTIV® REACH™ G for Landscaping & Nurseries	✓	●	●						⁂
F: Granules (perlite, peat) **S:** 10 kg (30 L) bag 4 kg (12 L) bag Case of 12 x 500 g (12 x 1.5 L) bags **C: Trees, shrubs and herbaceous plants:** see page "Landscaping & Nurseries" for details.									
AGTIV® REACH™ P for Landscaping & Nurseries	✓*	●			●	●			∴
F: Powder (kaolin clay, peat powder) **S:** Case of 2 x 500 g (2 x 1.1 lb) bags **C: Trees, shrubs and herbaceous plants:** see page "Landscaping & Nurseries" for details.									
TURF									
AGTIV® REACH™ G TURF	✓*						●	●	⁂
F: Granules (zeolite) **S:** 20 kg (44 lb) bag **C:** Turf: **1000 m² (10765 ft²)**									
AGTIV® REACH™ P for Seed Mixing	✓*			●			●		∴
F: Powder (kaolin clay) **S:** 2 kg (4.4 lb) pail **C:** Turf: **2.7 ha (6.6 acres)**									
MULTI-CROPS									
AGTIV® REACH™ G	✓	●	●						⁂
F: Granules (peat) **S:** 6 kg (13.2 lb) pail 18.2 kg (40 lb) bag **C: Vegetables, herbs, berries & fruit trees:** see page "Multi-Crops" for details.									
AGTIV® REACH™ P	✓	●	●	●		●			∴
F: Powder (peat) **S:** Case of 4 x 800 g (4 x 1.75 lb) pails **C: Vegetables, berries & garlic:** see page "Multi-Crops" for details.									

ACTIVE INGREDIENTS

M MYCORRHIZAE

ENDOMYCORRHIZAE
PTB297 Technology, *Rhizophagus irregularis*

ECTOMYCORRHIZAE
Pisolithus tinctorius
Rhizopogon amylopogon
Rhizopogon fulvigleba
Rhizopogon villosulus
Rhizopogon luteolus

LEGEND

F: Formulation
S: Size
C: Crop/Coverage
✓ For organic use

* USA only

FORMULATIONS

⁂ Granular | ∴ Powder

Learn more

Product availability may vary depending on the territory.

- Minimizes transplant shock
- Ensures faster establishment
- Reduces watering needs

LANDSCAPING & NURSERIES

UP TO **50%** LESS PLANT MORTALITY

CLICK HERE to learn more

GRANULAR

AGTIV® REACH™ G
for Landscaping & Nurseries

ACTIVE INGREDIENTS:

M **ENDOMYCORRHIZAE**
PTB297 Technology, *Rhizophagus irregularis:* 15 viable spores/g

ECTOMYCORRHIZAE
Pisolithus tinctorius: 100 000 spores/g
Rhizopogon amylopogon: 7500 spores/g
Rhizopogon fulvigleba: 7500 spores/g
Rhizopogon villosulus: 7500 spores/g
Rhizopogon luteolus: 7500 spores/g
Ascophyllum nodosum: 0.4%

OMRI LISTED — USA only

INERT INGREDIENTS: Perlite, peat

SIZE	CODE
12 x 500 g (12 x 1.5 L – 12 x 1.4 US dry qt) – bags	714504
4 kg (12 L – 10.9 US dry qt) – bag	714511
10 kg (30 L – 27.2 US dry qt) – bag	714501

DIRECTIONS FOR USE

INCORPORATION INTO GROWING MEDIA

Mix inoculant thoroughly into the growing media before filling the containers. Incorporate gradually while mixing for an even distribution.

Volume of growing media treated per 12 L bag of AGTIV®

Container volume	Volume of growing media treated
500 ml or less	8.5 ft³ (240 L)
500-1500 ml	10.6 ft³ (300 L)
1500 ml or more	14.1 ft³ (400 L)

TRANSPLANTING INTO CONTAINERS — When transplanting, apply the product directly on roots or in the container. Refer to the application chart below.

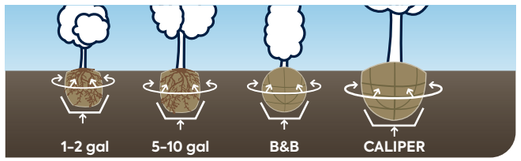
TRANSPLANTING INTO SOIL

TREES AND SHRUBS — 1. Dig planting hole approximately twice the size of the transplant's root ball. **2.** Spread this product all around the root ball where new root growth will occur and cover sides and bottom of planting area. Refer to the application chart below. Be sure that the roots are in contact with the product. **3.** Position transplant in the center of the planting hole and fill the remaining area around the root ball with soil. **4.** Water to settle planting area.

ANNUALS, PERENNIALS AND BULBS — Apply directly to the roots or in the planting hole at a rate of 30 ml (2 Tbsp) per plant and 15 ml (1 Tbsp) per bulb.

Required quantity

Container	AGTIV® Cup	AGTIV® ml
Plugs	1/16	15
4 in.	1/8	30
#1	¼	65
#2	½	125
#5	1	250
#10	1 ½	375
#20	2	500
Caliper	**AGTIV® Cup**	**AGTIV® ml**
1.0-1.5 in. (25-40 mm)	2	500
1.6-2.0 in. (41-50 mm)	3	750
2.1-2.5 in. (51-65 mm)	4	1000
2.6-3.0 in. (66-75 mm)	5	1250
3.1-4.0 in. (76-100 mm)	6	1500
4.1 in. + (101 mm +)	7 ½	1875



AGTIV LANDSCAPING PROGRAM — Learn more

POWDER

AGTIV® REACH™ P
for Landscaping & Nurseries

ACTIVE INGREDIENTS:

M **ENDOMYCORRHIZAE**
PTB297 Technology, *Rhizophagus irregularis:* 400 viable spores/g

ECTOMYCORRHIZAE
Pisolithus tinctorius: 6 600 000 spores/g
Rhizopogon amylopogon: 107 000 spores/g
Rhizopogon fulvigleba: 107 000 spores/g
Rhizopogon villosulus: 107 000 spores/g
Rhizopogon luteolus: 107 000 spores/g
Humic acids: 3%
Ascophyllum nodosum: 2%

INERT INGREDIENTS: Kaolin clay, peat powder
PARTICLE SIZE: 0.15 mm (100 mesh)

SIZE	CODE
2 x 500 g (2 x 1.1 lb) – bags	714704

DIRECTIONS FOR USE

INCORPORATION INTO GROWING MEDIA

Mix the quantity of product shown in the table into the growing media. For a better homogeneity, premix the recommended quantity of product to a part of the growing media or one of the substrate ingredients. Mix well until homogeneity before filling the containers.

Quantity of product to use per volume of growing media

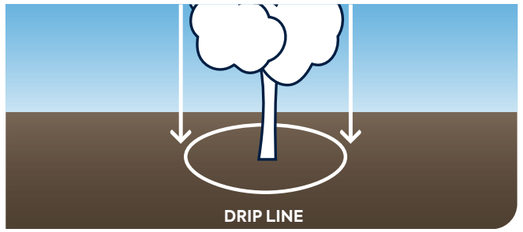
Container volume	Quantity of product to add per yd³ of media	Quantity of product to add per m³ of media
500 ml or less	4 cups (475 g)	5 ¼ cups (625 g)
500-1500 ml	3 ¼ cups (380 g)	4 ¼ cups (500 g)
1500 ml or more	2 ⅓ cups (285 g)	3 ¼ cups (375 g)

BARE ROOTS DIPPING

Just before planting, coat the bare roots with the product. One 1.1 lb (500 g) bag can treat up to 660 bare roots (according to plant size).

SOIL INJECTION

MATURE TREES AND SHRUBS — This application is recommended when treatments requiring injection work in the root zone must be carried out. Add one 1.1 lb (500 g) bag of this product to 370 gallons (1400 liters) of clean, non-chlorinated water. Agitate thoroughly. Inject the mixed product into the upper 8-10 in. (20-25 cm) of the root zone with the use of a soil probe. Treat the root zone under the canopy and beyond the drip line. Inject at a rate of 35 fl. oz (1 liter) per injection hole in a grid pattern (30-36 in., 75-90 cm centers). One 1.1 lb (500 g) bag treats 9150 ft² (850 m²).



The following plant families cannot be colonized by the endomycorrhizal fungi contained in AGTIV®: *Orchidaceae* (orchids), *Ericaceae* (rhododendron, blueberries), *Brassicaceae* (cabbages), *Amaranthaceae* (kochias), *Cariophyllaceae* (carnations), Lupins.

- Ensures faster establishment
- Reduces watering needs
- Improves soil structure

GRANULAR

AGTIV® REACH™ G
TURF

ACTIVE INGREDIENT:

M **MYCORRHIZAE** – PTB297 Technology
Rhizophagus irregularis: 12 viable spores/g

INERT INGREDIENT: Zeolite
PARTICLE SIZE: 0.4 mm to 1.4 mm (14-40 mesh)

SIZE	COVERS	CODE
20 kg (44 lb) – bag	1000 m² (10,765 ft²)	713701

DIRECTIONS FOR USE
LAYING SOD, SEEDING, BROADCAST

At seeding, when laying sod or for turf maintenance, incorporate granules into the rooting zone at a rate of 4 lb per 1000 ft² (2 kg per 100 m²). Water well after placing the inoculum. This product can also be used when seeding wildflowers.

POWDER

AGTIV® REACH™ P
for Seed Mixing

ACTIVE INGREDIENT:

M **MYCORRHIZAE** – PTB297 Technology
Rhizophagus irregularis: 3200 viable spores/g

INERT INGREDIENT: Kaolin clay
PARTICLE SIZE: < 1 mm (18 mesh)

SIZE	COVERS	CODE
2 kg (4.4 lb) – pail	2.7 ha (6.6 acres)	713903

DIRECTIONS FOR USE
TURF

Mix uniformly with seeds at a rate of 0.25 oz per 1000 ft² (7.5 g per 100 m²) of seeds. This product may “bulk up” seeds. It is important to calibrate the equipment to ensure correct seeding rate is attained. Avoid using the product with wet equipment.

HYDROSEEDING

Apply at a rate of 0.25 oz per 1000 ft² (7.5 g per 100 m²) of surface area to seed. Avoid mixing with fertilizers and pesticides. Rinse well the tank prior to introducing product and after application.

TURF

CLICK HERE
to learn more

UP TO
13%
INCREASE IN TURF DENSITY

UP TO
26%
DECREASE IN BARE SPOTS

- Increases plant establishment and survival
- Improves soil structure and reduces erosion
- Produces more vigorous plants

MULTI-CROPS

VEGETABLES, FRUIT TREES & BERRIES

CLICK HERE to learn more

STRAWBERRIES
14.0%
AVERAGE YIELD INCREASE

PEPPERS
6.8%
AVERAGE YIELD INCREASE

ONIONS
7.4%
AVERAGE YIELD INCREASE

CARROTS
7.7%
AVERAGE YIELD INCREASE

POWDER

AGTIV® REACH™ P

ACTIVE INGREDIENT:

MYCORRHIZAE – PTB297 Technology
Rhizophagus irregularis: 8000 viable spores/g

INERT INGREDIENT: Peat
PARTICLE SIZE: < 1 mm (18 mesh)
BULK DENSITY: 400 g/L (1 lb/US dry qt)

SIZE	CODE
4 x 800 g (4 x 1.75 lb) – pails	712324

DIRECTIONS FOR USE

TRANSPLANTING

VEGETABLE TRANSPLANTS OR BARE-ROOT BERRIES — Right before planting, coat the root plugs or the bare roots with the product. A 800 g pail of product can treat up to 117 000 transplants or 21 300 bare roots (according to plant size).
ASPARAGUS — Right before planting, coat the bottom of the crown with the product. The recommended quantity is 38 g (80 ml) for 1 000 crowns.

INCORPORATION INTO GROWING MEDIA

Mix the quantity of product into the growing media. For application chart, visit PTAGTIV.COM/en/REACH-P. For a better homogeneity, it is preferable to premix the recommended quantity of product to a part of the growing media (or one of the dry ingredient used in its composition). For application onto tray surface, contact your local representative for application details depending on your practices.

MIXING WITH SEEDS

At planting time, mix evenly with seeds (Table 1). Ensure uniform seed coverage is obtained. The product formulation may "bulk up" seeds. It is important to calibrate the planter to ensure correct planting rate is attained. Avoid using AGTIV® with wet equipment. When seeding, ensure full seed-soil contact to minimize any desiccation of the inoculant.

Table 1 – Quantity of AGTIV® to use per 1 000 seeds

Type of seed	g	oz	ml
Nantes carrot	0.34	0.012	0.7
Market carrot	0.33	0.012	0.7
Spanish onion	0.56	0.020	1.2
Yellow onion	0.41	0.015	0.9
Lettuce	0.42	0.015	0.9
Pea/bean	0.38	0.013	0.8
Cucumber	1.98	0.070	4.2
Squash/pumpkin	4.95	0.170	10.4
Garlic	37.50	1.320	78.9

1 cup equals 240 ml (96 g) of product.

GRANULAR

AGTIV® REACH™ G

ACTIVE INGREDIENT:

MYCORRHIZAE – PTB297 Technology
Rhizophagus irregularis: 178 viable spores/g

INERT INGREDIENT: Peat
PARTICLE SIZE: 0.5 mm to 2.5 mm (8 - 30 mesh)
BULK DENSITY: 600 g/L (37.4 lb/ft³)

SIZE	CODE
18.2 kg (40 lb) – bag	712101
6 kg (13.2 lb) – pail	712103

DIRECTIONS FOR USE

IN-FURROW — Apply directly in-furrow at a rate of 40 g (1/4 cup) per 100 m row length (0,26 lb/1000 ft).

INCORPORATION INTO GROWING MEDIA — Mix thoroughly into the growing media before filling the trays.

Quantity of AGTIV® to use per volume of growing media

Cell or container volume	Qty of product to add/m³ of media	Qty of product to add/yd³ of media
40-200 ml	3.4 kg (5.6 L)	5.7 lb (18 cups)
200-500 ml	2.2 kg (3.7 L)	3.8 lb (12 cups)
500 ml-1500 ml	1.1 kg (1.9 L)	1.9 lb (6 cups)
1500 ml or more	0.8 kg (1.4 L)	1.4 lb (4.5 cups)

TRANSPLANTING — Apply the product at the bottom and on the sides of the planting hole. Product must be in direct contact with roots.

BERRIES	FRUIT TREES
1.7 g (1 tsp)	8 g (1 Tbsp)

The following plant families cannot be colonized by the endomycorrhizal fungi contained in AGTIV®: *Brassicaceae* (broccoli, cabbages, cauliflower, radish, rutabaga, watercress), *Chenopodiaceae* (beets, spinach), *Ericaceae* (blueberries, cranberries).

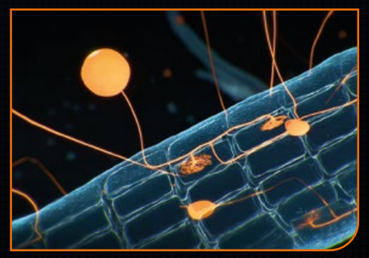
10 FACTS ABOUT AGTIV® REACH™

AGTIV® REACH™ HELPS PLANTS REACH AND ABSORB MORE NUTRIENTS AND WATER THANKS TO **MYCORRHIZAE**

MYCORRHIZAE

PTB297 Technology,
Rhizophagus irregularis (formerly known as *Glomus intraradices*)

- Expands root system
- Enhances nutrient and water uptake
- Promotes plant robustness and vigor



Learn more

CLICK HERE to learn more

1 QUICK COLONIZER

Achieve marketable size up to 3 weeks earlier with mycorrhizae[A].

2 EFFICIENT NUTRIENT AND WATER UPTAKE & TRANSFER

10x more area for water uptake with mycorrhizae[B].

3 VERSATILE & EFFICIENT COLLABORATOR

80% of plants can be colonized with the collaborative[C] mycorrhizal species *Rhizophagus irregularis.*

4 ALWAYS COMPARED NEVER EQUALED

Selected more than 40 years ago, Premier Tech' species has been tested continuously under various conditions and has demonstrated the efficacy and benefits of the mycorrhizal species *Rhizophagus irregularis.*

5 SOIL POPULATION

Various articles demonstrate that mycorrhizal populations in soils are highly heterogeneous or not sufficient to have the desired beneficial effect.

6 40 YEARS OF EXPERTISE

From the selection of strains to in-field results, Premier Tech products consistently follow the highest quality standards.

7 COMPLEMENTARY PARTNERSHIP BETWEEN ENDO & ECTO

Endomycorrhizae associate with 80% of plants, most deciduous trees and herbaceous plants, and ectomycorrhizae* associate with 15% of plants, most conifers and evergreens.

8 MULTIPLE SPECIES VS ONE

Rhizophagus irregularis has turned up as a wonder fungus in several surveys, and field experience so far has shown it to be equal or superior to mixtures of other fungi[D].

9 BETTER SOIL STRUCTURE

Mycorrhizae play a major role in the soil particle aggregation process leading to improved soil structure.

10 VIABLE SPORES VS PROPAGULES

Not all spores have the same tolerance or vigor. Premier Tech produces viable spores and guarantees their concentration, their longevity and their ability to colonize plant roots.

*Ectomycorrhizae are offered in **AGTIV® REACH™ G for Landscaping & Nurseries** and **AGTIV® REACH™ P for Landscaping & Nurseries**.

Sources:
[A] Vege review. C. Baum et al. / Scientia Horticulturae 187 (2015) 131-141.
[B] Jones, C. E. 2009. Mycorrhizal fungi – powerhouse of the soil. Evergreen Farming 8:4-5.
[C] Kiers et al. 2011. Reciprocal Rewards Stabilize Cooperation in the Mycorrhizal Symbiosis, Science 333:80-882.
[D] Anusuya, D. (2007) Vesicular Arbuscular Mycorrhizal Biotechnology: Current Trends and Futures Prospects. In: Trivedi P.C. (eds) Organic Farming and Mycorrhizae in Agriculture. I.K. International Publishing House pp.125-134.

CELEBRATING DECADES OF **INNOVATION** AND **VALUE**

40
years
OF EXPERTISE IN ACTIVE INGREDIENTS

Established manufacturer and marketer, Premier Tech builds on innovation and collaboration with local partners and clients to offer reliable high-quality inoculants. Every day, in our labs, facilities, and in the field, highly experienced scientists, engineers, and specialists from various domains collaborate to maximize the outcomes of research and turn them into effective products making a difference on your bottom line.

Learn more

CLICK HERE to learn more

PRODUCTION

In 2000, Premier Tech set up a world-first endomycorrhizal inoculum plant, developing a new mycoreactor process for industrial scale production. Backed by 40 years of expertise in active ingredients, Premier Tech constantly develops and innovates in terms of production of MYCORRHIZAE, RHIZOBIUM, BACILLUS, SERENDIPITA and other active ingredients:

- No contamination through a strictly controlled and aseptic environment
- Large-scale manufacturing production
- Adapted quality control for each step of the production processes, ensuring consistent high-quality inoculum

FORMULATION

Premier Tech's know-how makes it possible to adapt formulations with multiple active ingredients, concentrations and carriers tailored to different crops and application methods. Because a quality inoculant makes all the difference, our proven formulations are based on these important elements:

- Carriers compatible with the active ingredients
- Formulations that guarantee active ingredient viability until use
- Quality control at several key points ensuring the performance of active ingredients
- Various formulations tailored for organic production

APPLICATION

Caring about our clients' success, each recommendation for product use takes into consideration validation by our field experts and by users themselves, which ensures:

- Effective application rates, at the right time and place, with the right inoculant
- Products adapted to professional equipment
- Validation of compatibility with other inputs

SERVICE

The AGTIV® experience combines highly effective value-added products and the access to a team of field experts dedicated to supporting your growth. From our management and research teams to our field specialists, our multidisciplinary team is listening to clients' needs to continuously improve our products and level of service:

- Technical support for product application, equipment compatibility and field demonstration
- Proud promoter of science education and knowledge sharing
- Partnership with distributors and green good suppliers throughout Canada, the United States and Europe

PREMIER TECH

RENOWNED **BRANDS**

AGTIV® PRO-MIX® C-I-L® wilson® ALASKAN®

RECOMMENDATIONS CHART

RECOMMENDATIONS	USAGES					
	LANDSCAPING & NURSERIES		TURF		MULTI-CROPS	
	AGTIV® REACH™ P for Landscaping & Nurseries	AGTIV® REACH™ G for Landscaping & Nurseries	AGTIV® REACH™ P for Seed Mixing	AGTIV® REACH™ G TURF	AGTIV® REACH™ P	AGTIV® REACH™ G
APPLICATION						
After coating, seed within			8h		8h	
Apply within 8 hours after mixing into the tank	•		•			
Avoid using the product with wet equipment			•	•	•	•
Ensure full seed-soil contact when seeding			•		•	
To avoid flow problems, do not fill tank or seed cart completely						•
Ensure the tank and the liquid application system are clean and free of chemical residues	•		•			
Apply to seed once treatment is dry			•		•	
Remove filters and use nozzles with openings of a minimum of 1 mm (18 mesh) to avoid clogging	•					
Maintain a constant and effective agitation in the tank during application	•		•			
Pump pressure must not exceed 200 psi	•					
Ensure the temperature of the diluted tank mix doesn't exceed	25°C (77°F)		25°C (77°F)			
CALIBRATION						
Calibrate the application system to deliver the correct amount of product			•	•	•	•
COMPATIBILITY						
Do not mix with fertilizers	•	•	•	•	•	•
Refer to the list of compatible pesticides and fertilizers on the website	•	•	•		•	
Do not mix this product and fungicide seed treatments in the same tank			•		•	
STORAGE						
Do not freeze or expose to temperatures above	35°C (95°F)	35°C (95°F)	35°C (95°F)	35°C (95°F)	35°C (95°F)	35°C (95°F)
Store the product at constant temperature, in a dry cool shaded place	•	•	•	•	•	•

GET THE INFO YOU NEED ON OUR **WEBSITE**

TOOLBOX

Brochures, labels, organic certificates and SDS

PTHORTICULTURE.COM/**toolbox-tl**

RESULTS

Efficacy report

PTHORTICULTURE.COM/**results-tl**

COMPATIBILITY

Pesticide compatibility lists
Liquid fertilizer compatibility lists

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EDUCATION

Articles

PTHORTICULTURE.COM/**blog**

PROGRAM

Landscaping Program

PTHORTICULTURE.COM/**agtiv-landscaping-program**

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AGTIV LANDSCAPING PROGRAM

2-YEAR WARRANTY

This Program offers financial support for up to 2 years to professional landscapers for the replacement of plants with AGTIV® REACH™ G for Landscaping & Nurseries 1.5 L and 12 L product formats.

DESIGNED BY NATURE.
PERFECTED BY SCIENCE.

CLICK HERE
to learn more

PEOPLE AND TECHNOLOGIES MAKING A DIFFERENCE

At Premier Tech, we are all about making a difference by connecting People and Technologies for more than 100 years. One team driven by a shared will to deliver sustainable solutions that help feed, protect and improve our world. Premier Tech has a wide range of products, services, brands, and technologies allowing to increase crop yields, bring beautiful gardens to life, automate the handling and packaging operations of many manufacturing facilities, treat and recycle water, support companies in their digital transformation, and offer bio-ingredients for the well-being of humans and animals.

PREMIER TECH

PT Growers and Consumers

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