



AGTIV[®]

PEA & LENTIL | GUIDE 2025

AGTIV[®]

DESIGNED BY NATURE. PERFECTED BY SCIENCE.



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AGTIV[®]

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BENEFITS FOR PEA & LENTIL

AGTIV® FUEL™ brings the **power of nitrogen** to the plant for **faster** and **stronger growth**.
AGTIV® FUEL™ gives the plant the push it needs to achieve its **potential**.

AGTIV® THRIVE™ helps plants flourish by improving the fixation and **uptake** of **nitrogen, nutrients** and **water**, while **protecting** against stressors like drought and soil compaction.

AGTIV® THRIVE™ contributes to better growth, thus increasing crop **yield** and **quality**.



EFFECTIVE

AGTIV[®]

PEA



LENTIL



AGTIV® FUEL™

AGTIV®



ACTIVE INGREDIENT(S)	ORGANIC	APPLICATION MODE				FORMULATION
		GRANULAR IN-FURROW	MIXING WITH SEEDS	LIQUID IN-FURROW	LIQUID ON SEED	

AGTIV® FUEL™ P PEA & LENTIL

F: Powder (peat)
 S: 4.7 kg (10.3 lb) pail
 C: Pea & faba bean: **16 ha (40 acres)** – Lentil: **24 ha (60 acres)**

R	✓	●			●●●●●
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AGTIV® FUEL™ G PEA & LENTIL

F: Granules (peat)
 S: 18.2 kg (40 lb) bag – 364 kg (800 lb) tote bag
 C: Pea, lentil & faba bean: **4 ha (10 acres)** – Tote bag: **80 ha (200 acres)**

R	✓	●			●●●●
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AGTIV® FUEL™ L PEA & LENTIL *

F: Liquid
 S: 8 L (8 kg) bag-in-box
 C: Pea, lentil & faba bean: **32 ha (80 acres)** or **6530 kg of seeds (240 bu)**

R	✓		●	●	●
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F: Formulation
 S: Size
 C: Coverage

✓ For organic use
 * Non eligible for organic use.
 Contact us for more details.

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AGTIV® FUEL™

AGTIV®

ON-FARM MIXING WITH SEEDS

AGTIV® FUEL™ P PEA & LENTIL



ACTIVE INGREDIENT:

R RHIZOBIUM – PTB160 Technology
Rhizobium leguminosarum biovar *viciae*: 1.6 x 10⁹ active cells/g

**COVERS
40/60
acres**

INERT INGREDIENT: Peat

PARTICLE SIZE: < 1 mm (18 mesh)

BULK DENSITY: 400 g/L (1 lb/US dry qt)

SIZE	COVERS	CODE
4.7 kg (10.3 lb) – pail	Pea & faba bean: 16 ha (40 acres) Lentil: 24 ha (60 acres)	710403

DIRECTIONS FOR USE

DRY APPLICATION — Mix evenly with seeds at the bottom of the grain auger while filling drill, or directly in the drill box. Ensure uniform seed coverage is obtained.

Peas & faba beans: apply at 300 g/ha (120 g or 4.2 oz/acre).

Lentils: apply at 200 g/ha (80 g or 2.8 oz/acre).

SLURRY APPLICATION — Pour one 4.7 kg pail in a clean container. Gradually add 8 - 10 litres of clean, non-chlorinated water and stir well. Add more water if the slurry is too thick. Pour onto the seeds and mix thoroughly to ensure even coating.

GRANULAR IN-FURROW

AGTIV® FUEL™ G PEA & LENTIL



ACTIVE INGREDIENT:

R RHIZOBIUM – PTB160 Technology
Rhizobium leguminosarum biovar *viciae*: 1.3 x 10⁹ viable cells/g

**COVERS
10/200
acres**

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	COVERS	CODE
18.2 kg (40 lb) – bag	4 ha (10 acres)	710111
364 kg (800 lb) – tote bag	80 ha (200 acres)	710112

DIRECTIONS FOR USE

Apply in the seed row at a rate of 4.5 kg/ha (4 lb/acre).

LIQUID FOR IN-FURROW OR ON SEED

AGTIV® FUEL™ L PEA & LENTIL



ACTIVE INGREDIENT:

R RHIZOBIUM – PTB160 Technology
Rhizobium leguminosarum biovar *viciae*: 6 x 10⁹ viable cells/g

**TREATS
240 bu**

PARTICLE SIZE: < 0.1 mm (150 mesh) Contains non-soluble particles

SIZE	COVERS	CODE
8 L (8 kg) – bag-in-box	In-furrow: 32 ha (80 acres) On seed: 6530 kg of seeds (240 bu)	710204

DIRECTIONS FOR USE

ON SEED — Shake well before use and apply directly to the seed. Apply 33 ml per 27 kg seeds, ensure full coverage. Optimum on-seed viability for 30 days when treated seeds are stored below 12°C (54°F).

IN-FURROW — Apply directly in the seed row at a rate of 250 ml/ha (100 ml/acre). This product should be applied using the AGTIV® Liquid Injection Kit. To apply, prepare the product mixture and adjust the Dosatron® injection rate following the application chart and video at PTAGTIV.COM/en/liquid-injection-kit.

* Use EXTENDER™ L for AGTIV® inoculants for longer shelf life.

EXTENDER™ L for AGTIV®

AGTIV®



LIQUID ADDITIVE FOR SEED APPLICATION

EXTENDER™ L for AGTIV® inoculants is a liquid additive designed for on seed application of AGTIV® inoculants, in order to prevent desiccation.

DIRECTIONS FOR USE

A bag of EXTENDER™ L for AGTIV® inoculants can treat up to 250 units of soybean or 240 bushels of pulses. Apply to seeds at a rate of 12.8 ml / 45 kg of seeds for soybean and 6.6 ml / 27 kg of seeds for pulses.

RECOMMENDATIONS

- Open package only when ready to use.
- Shake well before use and maintain a constant and effective agitation in the tank during application.
- Calibrate the application system to deliver the correct amount of mixture of AGTIV® inoculant and EXTENDER™ L for AGTIV® inoculants.
- Ensure the tank and the liquid application system are clean and free of chemical residues.
- Ensure the temperature of the diluted tank mix does not exceed 22°C (72°F).
- Prepare only as much of mixture as will be used that day.
- Ensure full seed coverage.
- Apply within 6 hours following mix into the tank.
- Respect the best before date on the label.

AGTIV® THRIVE™

AGTIV®



AGTIV® THRIVE™ P PEA & LENTIL

F: Powder (peat)
 S: 4.7 kg (10.3 lb) pail – 2.4 kg (5.3 lb) pail
 C: Pea & faba bean: Pail 4.7 kg: **16 ha (40 acres)** – Pail 2.4 kg: **8 ha (20 acres)**
 Lentil: Pail 4.7 kg: **24 ha (60 acres)**

M R	✓	●	●	●	●
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AGTIV® THRIVE™ G PEA & LENTIL

F: Granules (peat)
 S: 18.2 kg (40 lb) bag – 364 kg (800 lb) tote bag
 C: Pea, lentil & faba bean: Bag: **4 ha (10 acres)** – Tote bag: **80 ha (200 acres)**

M R	✓	●			●
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AGTIV® THRIVE™ PEA & LENTIL

F: Liquid
 S: Combo box: 8 L (8 kg) bag-in-box + 4 x 950 ml (4 x 32 fl. oz) bottles
 C: Pea, lentil & faba bean: **32 ha (80 acres)**

M R	✓		●		●
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F: Formulation
 S: Size
 C: Coverage

✓ For organic use
 * Non eligible for organic use.
 Contact us for more details.

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AGTIV® THRIVE™



ON-FARM MIXING WITH SEEDS

AGTIV® THRIVE™ P PEA & LENTIL



ACTIVE INGREDIENTS:

M MYCORRHIZAE – PTB297 Technology
Rhizopagus irregularis: 2750 viable spores/g

R RHIZOBIUM – PTB160 Technology
Rhizobium leguminosarum biovar *viciae*: 1.6×10^9 active cells/g

INERT INGREDIENT: Peat

PARTICLE SIZE: < 1 mm (18 mesh)

BULK DENSITY: 400 g/L (1 lb/US dry qt)

SIZE	COVERS	CODE
4.7 kg (10.3 lb) – pail	Pea & faba bean: 16 ha (40 acres) Lentil: 24 ha (60 acres)	710303
2.4 kg (5.3 lb) – pail	Pea & faba bean: 8 ha (20 acres)	710313

**COVERS
40/60
acres**

DIRECTIONS FOR USE

DRY APPLICATION — Mix evenly with seeds at the bottom of the grain auger while filling drill, or directly in the drill box. Ensure uniform seed coverage is obtained.

Peas & faba beans: apply at 300 g/ha (120 g or 4.2 oz/acre).

Lentils: apply at 200 g/ha (80 g or 2.8 oz/acre).

SLURRY APPLICATION — Pour one 4.7 kg pail in a clean container. Gradually add 8-10 liters of clean, non-chlorinated water and stir well (for one 2.4 kg pail, add only 4-5 liters of water). Add more water if the slurry is too thick. Pour onto the seeds and mix thoroughly to ensure even coating.

GRANULAR IN-FURROW

AGTIV® THRIVE™ G PEA & LENTIL



ACTIVE INGREDIENTS:

M MYCORRHIZAE – PTB297 Technology
Rhizopagus irregularis: 178 viable spores/g

R RHIZOBIUM – PTB160 Technology
Rhizobium leguminosarum biovar *viciae*: 1.3×10^8 viable cells/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	COVERS	CODE
18.2 kg (40 lb) – bag	4 ha (10 acres)	710101
364 kg (800 lb) – tote bag	80 ha (200 acres)	710102

**COVERS
10/200
acres**

DIRECTIONS FOR USE

Apply in the seed row at a rate of 4.5 kg/ha (4 lb/acre).

COMBO LIQUID FOR IN-FURROW

AGTIV® THRIVE™ PEA & LENTIL



ACTIVE INGREDIENTS:

M MYCORRHIZAE – PTB297 Technology
Rhizopagus irregularis: 6400 viable spores/g

R RHIZOBIUM – PTB160 Technology
Rhizobium leguminosarum biovar *viciae*: 6×10^9 viable cells/g

INERT INGREDIENT: Water

PARTICLE SIZE: < 0.2 mm (70 mesh) – PTB297 Technology

< 0.1 mm (150 mesh) – PTB160 Technology

Contains non-soluble particles

SIZE	COVERS	CODE
Combo box: 4 x 950 ml (4 x 32 fl. oz) – bottles 8 L (8 kg) – bag-in-box	32 ha (80 acres)	710214

**COVERS
80
acres**

DIRECTIONS FOR USE

This product should be applied using the AGTIV® Liquid Injection Kit. To apply, pour 4 x 950 ml bottles of Mycorrhizae and one 8 L bladder of Rhizobium in the tank and adjust the Dosatron® injection rate following the application chart and video at PTAGTIV.COM/en/liquid-injection-kit.

Apply directly in the seed row at a rate of 118.75 ml/ha (47.5 ml/acre) for Mycorrhizae and 250 ml/ha (100 ml/acre) for Rhizobium, for a total of 368.75 ml/ha (147.5 ml/acre). If the mixture does not contain pesticides or fertilizers, it can be emptied, refrigerated and used within 24 hours.



F: Formulation
S: Size
C: Coverage

✓ For organic use
* Non eligible for organic use.
Contact us for more details.

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TRIPARTITE SYMBIOSIS

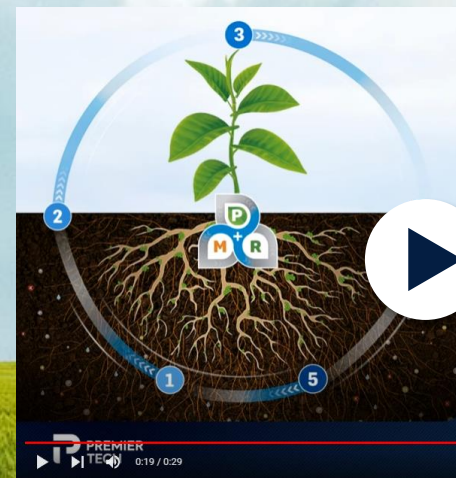
EXPLAINED BY OUR EXPERTS


M MYCORRHIZAE + **R** RHIZOBIUM + **P** PLANT



TRIPARTITE SYMBIOSIS

Play (k) 2:09 / 3:57



Tripartite symbiosis 

- 1** **M** Mycorrhizae take up P & water from soil to transfer to **P** plant
- 2** **P** Plant can give more P to **R** rhizobium to fix more N
- 3** **P** Plant will photosynthesize 51% more and grow faster
- 4** **P** Plant gives carbon to its **R** rhizobium & **M** mycorrhizae partners
- 5** **M** Mycorrhizae will propagate and spread **R** rhizobium to other roots

PREMIER TECH 0:19 / 0:29 PTAGTIV.COM

AGTIV[®] LIQUID INJECTION KIT

AGTIV[®]

- The AGTIV[®] Liquid Injection Kit is designed to apply the AGTIV[®] liquid products.
- The kit must be installed on the existing in-furrow liquid system of the planter as shown in the application videos.
- The mycorrhizae must be injected directly in the furrow close to the seeds.
- **GOAL:** To facilitate the use and application of the AGTIV[®] with maximum accuracy and without affecting the mycorrhizae spores and in-furrow equipment.



YIELD RESULTS

AGTIV®



LENTIL



2.7 bu/ac
8.8%

AGTIV® THRIVE™ PEA & LENTIL
66 sites over 14 years, Canada



PEA



3.4 bu/ac
6.0%

AGTIV® THRIVE™ PEA & LENTIL
27 sites over 12 years, Canada



[CLICK HERE FOR DETAILS](#)

PESTICIDES AND FERTILIZERS COMPATIBILITY

Dual action mycorrhizae and rhizobium products make plants **THRIVE** by increasing nutrient uptake.

Single action rhizobium products **FUEL** legumes by fixing nitrogen for better growth.

Our inoculants are compatible with most pesticides and liquid fertilizers.

Mycorrhizae

PESTICIDES

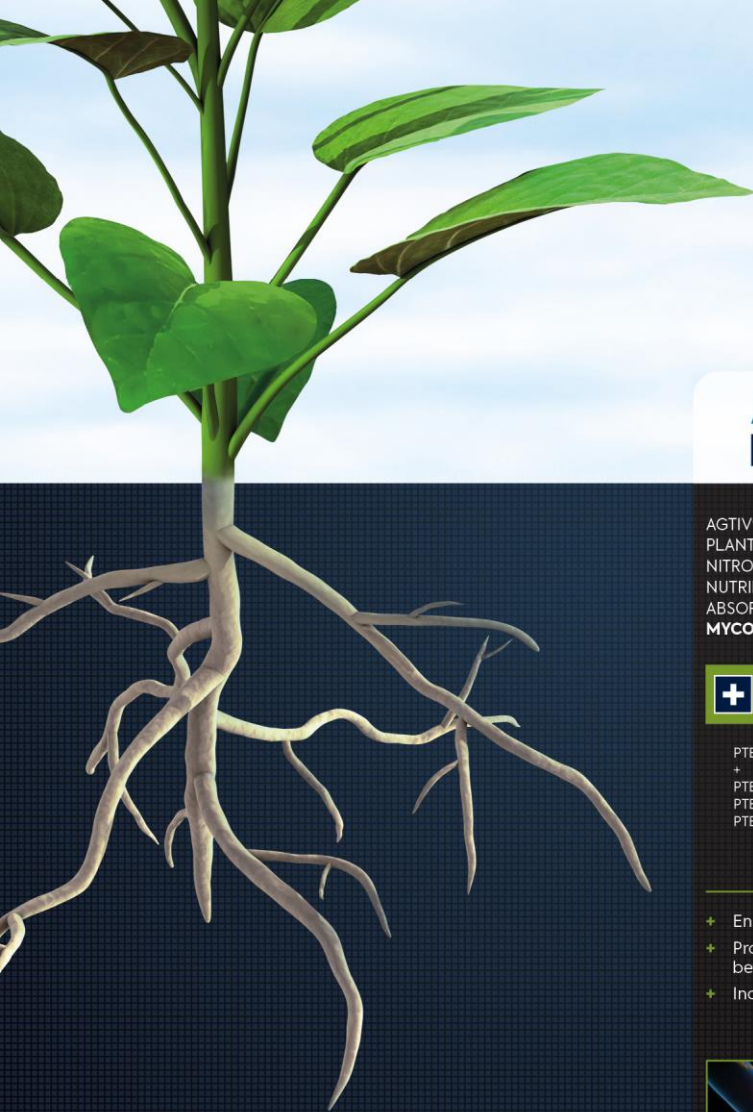
**LIQUID FERTILIZER
IN-FURROW**

**LIQUID FERTILIZER
ON SEED**

Rhizobium

PESTICIDES

**LIQUID FERTILIZER
IN-FURROW**



AGTIV.

BIOLOGICAL ACTIVE INGREDIENTS

For more than 100 years, Premier Tech has been growing along with producers. Being a world leader in the industrial production of mycorrhizal inoculants has inspired us to go further in our search for natural technologies. Since then, we have introduced the benefits of *Bacillus*, rhizobium, and *Serendipita* to the agricultural market. Furthermore, we have combined these powerful technologies to improve the quality and the yield of crops for the benefit of our clients.

AGTIV. THRIVE.

AGTIV® THRIVE™ POWERS PLANTS BY BOOSTING NITROGEN FIXATION, NUTRIENT AND WATER ABSORPTION THANKS TO **MYCORRHIZAE & RHIZOBIUM**

+ MYCORRHIZAE + RHIZOBIUM

PTB297 Technology + PTB160 (pea & lentil) PTB162 (soybean) PTB161 (chickpea)

- + Enhances P uptake
- + Provides more energy for better nitrogen fixation
- + Increases photosynthesis



AGTIV. ENRICH.

AGTIV® ENRICH™ STRENGTHENS LEGUME NITROGEN FIXATION AND PROVIDES A VIGOROUS ROOT SYSTEM THANKS TO **RHIZOBIUM & BACILLUS**

+ RHIZOBIUM + BACILLUS

PTB162 Technology + PTB180 Technology

- + Increases nodulation and nitrogen fixation
- + Improves rooting environment
- + Enhances plant vigor and productivity



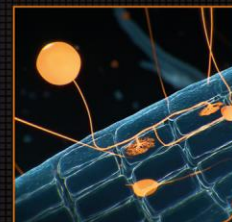
AGTIV. REACH.

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

M MYCORRHIZAE

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

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



AGTIV. IGNITE.

AGTIV® IGNITE™ IMPROVES PHOTOSYNTHESIS AND MITIGATES IMPACT OF ENVIRONMENTAL STRESSES THANKS TO **SERENDIPITA**

S SERENDIPITA

PTB299 Technology, *Serendipita indica*

- + Mitigates abiotic stresses
- + Increases photosynthesis rate
- + Enhances plant establishment, growth and yield



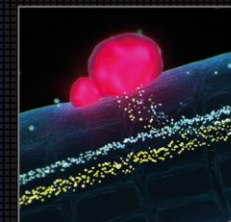
AGTIV. FUEL.

AGTIV® FUEL™ FEEDS LEGUMES BY FIXING ATMOSPHERIC NITROGEN THANKS TO **RHIZOBIUM**

R RHIZOBIUM

PTB160 Technology (pea & lentil) *Rhizobium leguminosarum* biovar *viciae* PTB162 Technology (soybean) *Bradyrhizobium japonicum* PTB161 Technology (chickpea) *Mesorhizobium onobrychidis*

- + Increases nodulation
- + Fixes nitrogen
- + Provides nutrients to pulses



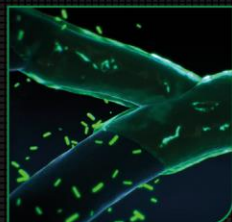
AGTIV. STIMULATE.

AGTIV® STIMULATE™ REINFORCES PLANTS WITH A HEALTHY ROOT ZONE THANKS TO **BACILLUS**

B BACILLUS

PTB180 Technology, *Bacillus pumilus* PTB185 Technology, *Bacillus Inaquosorum*

- + Stimulates rooting environment
- + Improves plant establishment
- + Increases plant vigor and productivity



Learn more at

[PTAGTIV.COM/en/technologies](https://ptagtiv.com/en/technologies)

CLICK ON A PICTURE TO SEE THE TECHNOLOGY IN ACTION

Since entering the agriculture market 15 years ago, we are constantly widening our AGTIV® inoculant offering to suit and benefit more crops.

While staying true to the AGTIV® brand's three pillars: **NATURE**, **SCIENCE** and **PERFORMANCE**, we are introducing new product names reflecting the actions of our inoculants for plants.



AGTIV®
FUEL

Single action **rhizobium** products FUEL legumes by fixing nitrogen for better growth.

AGTIV®
THRIVE

Dual action **mycorrhizae** and **rhizobium** products make plants THRIVE by increasing nutrient uptake.

AGTIV®
ENRICH

Dual action **rhizobium** and **Bacillus** collaborate to ENRICH the plant's nitrogen fixation with a healthy root system.

AGTIV®
STIMULATE

Single action **Bacillus** products STIMULATE the plant to grow more efficiently with a healthy root zone.

AGTIV®
IGNITE

Single action **Serendipita** products IGNITE plant growth and chlorophyll content for better yields.

AGTIV®
REACH

Single action **mycorrhizae** products REACH into the soil and help uptake more nutrients and water.

AGTIV®

**DESIGNED BY NATURE.
PERFECTED BY SCIENCE.**

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

Discover more at

PTAGTIV.COM/brand

ONLINE TOOLS



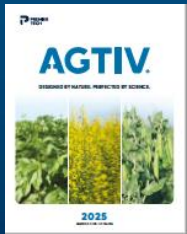
LABELS



EFFICACY REPORT



APPLICATION VIDEOS



BROCHURES



SOCIAL MEDIA

AND MUCH MORE:

[Safety data sheets](#), [organic certificates](#)

