



TECHNICAL DATA SHEET



Tannins

**BOTANICAL BACTERICIDE
WETTABLE POWDER (WP)**

Agry Gent Natura® is a novel patented bactericide which its active ingredient are the tannins (hydrolysable and condensed) of natural origin derived from black acacia plant extract. Due to it is a natural product, it can be applied at any crop stage until harvest.

Agry Gent Natura® is a product that acts by contact on phytopathogenic bacteria with an exclusive mode of action that effects energy intake and therefore bacterial nutritional metabolism.

PERCENTAGE COMPOSITION

Active ingredient:

Total tannins (Gallic acid)..... 11.5%
*Derived from black acacia extract
(Acacia mearnsii)*

Inert ingredients:

Dispersants, humectant and thickener
.....88.5%

PACKING

Agry Gent Natura® presentation:
1Kg, wettable powder.

ADVANTAGES:

- ✓ Tolerances free (LMR)
- ✓ Safe to use
- ✓ New molecule for agriculture
- ✓ Novel technology

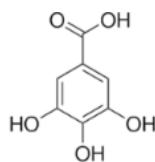
ACTION MODE

On bacteria the tannins react with various types of bacterial cell wall proteins and these are degraded by a redox reaction causing the precipitation of proteins through the break of the β -1,4 bond of murein or the ether types, favoring to the formation of toroidal pores causing the lysis of the bacteria due to cytoplasmic loss. In addition, ketone groups are formed, which are catalysts that promote oxidation and degradation of the cell wall.



CHEMICAL INFORMATION

- 1.1. **Common name:** Tannins
- 1.2. **Chemical name (IUPAC):** Gallic acid monomeric unit of tannins (3,4,5-trihydroxybenzoic acid)
- 1.3. **CAS Registry Number:** 149-91-7
- 1.4. **Chemical group:** Polyphenols
- 1.5. **Chemical formula:** C₇H₆O₂
- 1.6. **Chemical structure**



Gallic acid

AUTHORIZED DOSE AND CROPS:

AUTHORIZED CROPS	DISEASE	DOSE	REMARKS
Summer squash, pumpkin, chayote, chilacayote, melon, cucumber and watermelon (SL)	Angular leaf spot <i>Pseudomonas lachrymans</i>	1 Kg/ha	Make 4 applications to the foliage at 7-day intervals when the first symptoms of the disease are detected, the recommended water volume for the application is 400 L/ha, or the necessary quantity to cover all the foliage
Eggplant, pepper, bell pepper, tomato, okra, potato and green tomato (SL)	Bacterial wilt <i>Ralstonia solanacearum</i>	1 Kg/ha	Make 4 applications to the foliage at 7-day intervals when the first symptoms of the disease are detected, the recommended water volume for the application is 400 L/ha
Onion, garlic, leek, chives and asparagus (SL)	Bacterial leaf spot <i>Pseudomonas viridiflava</i>	1 Kg/ha	Make 4 applications to the foliage at 5, 7, 8 and 7 day intervals when the first symptoms of the disease are detected, the recommended water volume for the application is 300 L/ha

() PHI. Preharvest Interval.

SL = Without limit



PRODUCT PREPARATION

Open the container carefully at the top and measure the indicated amount of product, mix it in the spray tank with half of the recommended water, then add the other half of the water and stir the mixture constantly. To increase the impregnation of the product, add an adjuvant in the mixture.

Apply with a sprayer (backpack or trailed), covering all foliage with a uniform spray flow rate.

Apply it immediately after preparing the mixture.

CONSIDERATIONS

Apply **Agry Gent Natura**® in favorable weather conditions, not during hours of maximum insolation. Do not apply if rain is forecast within 4 hours after application. Do not apply with wind speeds greater than 15 km/hour. Preferably apply in the morning or evening.

COMPATIBILITY

Agry Gent Natura® is not recommended in tank mixture. If you desire to mix, the mixture must be made with products registered in the crops indicated here; However, it is necessary to perform a compatibility and phytotoxicity test prior to application.

PHYTOTOXICITY

Agry Gent Natura® is not phytotoxic to the indicated crops here, if applied according to label recommendations.

RESISTANCE MANAGEMENT

“TO PREVENT THE DEVELOPMENT OF RESISTANT POPULATIONS, ALWAYS RESPECT THE DOSE AND FREQUENCY OF APPLICATION; AVOID THE REPEATED USE OF THIS PRODUCT, ALTERNATING IT WITH OTHER CHEMICAL GROUPS WITH DIFFERENT MODES OF ACTION AND DIFFERENT DETOXIFICATION MECHANISMS AND THROUGH THE SUPPORT OF OTHER CONTROL METHODS”.

MANUFACTURER AND REGISTRY HOLDER

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