

#### DATA SHEET

### NACILLUS® (WP) **BACTERICIDE WETTABLE POWDER (WP)**

NACILLUS® WP is a biological bactericide composed of native strains of the: Biological Control Agents Bacillus spp. and Brevibacillus brevis. With action on bacteria according to the instructions for use.

The formulation of NACILLUS® WP is composed of endospores, which are recognized as the most resistant survival structures in nature, being able to withstand high temperatures and absolute lack of humidity.

Strains of Bacillus spp. and Brevibacillus brevis used have bactericidal action through competition, antibiosis and predation of phytopathogenic bacteria, achieving both preventive and curative control of the diseases presented in the "Instructions for use" table.

Biological bactericide composed of native strains of the Biological Control Agents Bacillus subtilis, Bacillus licheniformis and Brevibacillus brevis.

#### SAG registration N° 2678O

Product suitable for use in Organic Agriculture according to: NOP Regulation and JAS Regulation. ECOCERT Control F-32600.

Product suitable for use in Organic Agriculture according to KIWA BCS regulation.

Product suitable for use in Biodynamic Agriculture according to the DEMETER International regulation.

#### **Formulation**

COMPOSITION	(% w/w)
Bacillus subtilis strain Antumávida Bacillus subtilis strain Vilcún Bacillus licheniformis strain Mallerauco Brevibacillus brevis strain Maguellines Brevibacillus brevis strain Maguellines I	0.602% w/w (6,02 g/Kg) 0.602% w/w (6,02 g/Kg) 0.602% w/w (6,02 g/Kg) 0.602% w/w (6,02 g/Kg) 0.602% w/w (6,02 g/Kg)
Coformulants c.s.p.	100% w/w (1 Kg)



## INSTRUCTIONS FOR USE TABLE INSTRUCTIONS FOR USE TABLE FOR TERRESTRIAL APPLICATIONS

CROP	DISEASE /PATHOGEN	DOSES (g/hL or 100l)	OBSERVATIONS
Stones (Cherry, Peach, Nectarines, Apricot and Plum)	Bacterial cancer (Pseudomonas syringae pv. syringae)	100 100 150	Post-harvest application. Application with 25, 75 and 100% leaf drop. Midwinter, green tips and full bloom. 7 applications according to phenological stage, maximum per season, with wetting levels of 1000-1500 l/ha.
Grapevine	Acid Rot (Acetobacter sp.)	3 kg/ha (in each application)	Apply in tightening, veraison and pre- harvest. (Wetting 600-800 I). Maximum 3 applications per season, depending on phenological stage.
Tomato	Bacterial spot (Xanthomonas campestris pv. vesicatoria)  Bacterial canker (Clavibacter Michiganensis subsp. michiganensis)  Bacterial freckle (Pseudomonas Syringae pv. tomato)	300 (Preventive) 500 (Healing)	In seedlings, transplants and after any work that generates wounds. Foliar application in seedlings and after transplanting, tying, first sprouting and application of hormones. (after any work that results in injury). Then, only in the presence of symptoms.  Curative, apply every 3 days, until lesions are dry and without progression. Minimum 2 applications and the maximum per season will depend on the phenological state, the work and the generation of wounds in the crop, with wetting of 300 -400 l/ha.



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Pear trees	Blight ( <i>Pseudomonas</i> <i>syringae</i> pv. <i>syringae</i> )	200 (according to orchard history, curative)	Foliar application at 10, 25, 50 and 100% flowering. Repeat in case of rain or frost Spring. 4 applications, depending on phenological stage, maximum per season with wetting of 1000 -2000 l/ha.
European hazelnut	Bacterial blight (Xanthomonas arboricola)	150	Application in bud break and flowering of catkins with wetting of 600-1000 l.  2 applications, depending on phenological stage, maximum per season.
Blueberries	Bacterial blight (Pseudomonas Syringae pv. syringae)	150	Application in leaf fall with wetting of 300 l/ha and in bud break and flowering with 600 l/ha. 4 applications, depending on phenological stage, maximum per season.
Kiwi	Bacterial blight (Pseudomonas syringae pv.) kiwi bacteriosis (Pseudomonas syringae pv. Actinidae)	150	Foliar application in bud break and flowering, and then spraying according to symptoms, with wetting of 1500 L. Minimum 2 applications and maximum according to symptoms.
Cabbage	Black rot (Xanthomonas campestris pv. Campestris)	300	Foliar application with wetting of 200 l/ha every 7 or 14 days in the presence of symptoms or conditions favorable to the disease. Repeat in the presence of new symptoms or favorable conditions for the pathogen.
Lettuce	Bacterial blight (Pseudomonas cichorii)	300	Foliar application with wetting of 200 l/ha every 7 or 14 days in the presence of symptoms or conditions favorable to the disease. Repeating in the presence of new symptoms, or favorable conditions for the pathogen.
Nogales	Black Death (Xanthomonas campestris pv. Juglandis)	150	Application at 5 and 50% elongation of catkins, with wetting of 1000-2500 l/ha. Application on fruit set, with wetting of 1000-2500 l/ha. 3 applications, depending on phenological stage, maximum per season.



#### INSTRUCTIONS FOR USE TABLE FOR AERIAL APPLICATIONS

CROP	DISEASE /PATHOGEN	DOSES (g/hL or 100l)	OBSERVATIONS
Tomato	Mancha bacteriana (Xanthomonas campestris pv. vesicatoria) Cancro bacterial (Clavibacter michiganensis subsp.michiganensis) Peca bacteriana (Pseudomonas syringae pv. tomato)	1	Foliar application from transplanting. Then, in the presence of symptoms with wetness of 50 to 80 liters.  Minimum 2 applications and the maximum per season will depend on the phenological state, the work and the generation of wounds in the crop.
European Avellano	Bacterial blight (Xanthomonas arboricola)	1	Application in budding and flowering of catkins, with wetting of 50 to 80 liters. 2 applications, depending on phenological stage, maximum per season.
Blueberries	Bacterial blight (Pseudomonas syringae pv. syringae)	0,9	Application in leaf fall, bud break and flowering, wetting from 50 to 80 liters. 4 Applications, depending on phenological stage, maximum per season.

**Preparation of the mixture:** Dissolve the required amount of **Nacillus®** in a bucket of water, shaking vigorously, then pour into the application equipment that has previously been filled halfway; Shake and finish filling. Keep with constant agitation. In order to ensure its effectiveness, the mixture should be used within a maximum period of 12 hours.

**Incompatibility:** Incompatibility for joint applications with cupric and antibiotic compounds. Do not mix **Nacillus®** with other pesticides without first performing a compatibility test. Check with the manufacturer's compatibility list.

**Phytotoxicity:** There is not phytotoxicity in recommended crops.

Grace Period: None.

**Re-entry time to the treated area:** In the case of humans, it is possible to re-enter 2 hours after application or once the deposit has dried on the foliage. For animals, this does not apply, as these crops are not animal consumption.

**Storage: Nacillus**® should be stored in its original sealed container, in a cool, dry environment. Maximum storage time: 24 months.

Use in organic and biodynamic agriculture:



# Product suitable for use in Organic Farming in accordance with: NOP Regulation and JAS Regulation. Control ECOCERT F-32600.



Product suitable for use in organic agriculture in accordance with the KIWA BCS regulation.

Product suitable for use in Biodynamic Agriculture in accordance with the DEMETER International regulation

Authorized by SAG for use in domestic organic agriculture.