

## DATA SHEET

### **PUELCHE® (WP) BIOLOGICAL FUNGICIDE WETTABLE POWDER (WP)**

**PUELCHE® (WP)** is a biological fungicide against *Botrytis cinerea*, *Alternaria solani* and *Phytophthora infestans*. The formulation is based on strains of *Hypocrea virens* and *Bacillus licheniformis*, which achieve effective control against phytopathogenic fungi.

The strains of *Hypocrea* spp and *Bacillus* spp have fungicidal action through mechanisms of competition, antibiosis and predation to achieve effective preventive and curative control against phytopathogenic fungi, as shown in the table "Instructions for use".

Biological fungicide based on mycelium and conidia of the Ñire strain of the fungus *Hypocrea virens* and based on spores of the Copihue strain of the bacterium *Bacillus licheniformis*.

**SAG Chile Registry No. 2.978-0.  
Authorized by SAG for Use in Organic Agriculture.**

#### Formulation:

COMPOSITION	(% w/w)
<i>Hypocrea virens</i> strain Ñire*	0.6% m/m (6 g/Kg)
<i>Bacillus licheniformis</i> cepa Copihue**	0.9% m/m (9 g/Kg)
Co-formulants c.s.p.	100 g (1 Kg)

\*  $1.8 \times 10^7$  cfu/g \*\*  $3.0 \times 10^7$  cfu/g

## INSTRUCTIONS FOR USE

CULTIVATION	DISEASE/PATHOGEN	DOSE	REMARKS
Grapevine	Gray rot ( <i>Botrytis cinerea</i> )	100 - 150 g/hl (minimum dose of 0.5 kg on trellises and 1 kg/ha on vines)	It is recommended to apply in doses of 100 g/hl with low disease pressure and in doses of 150 g/hl with high pressure. Apply with predisposing conditions for the disease (free water or symptoms of the disease), from veraison onwards. Suggested wetting of 500-1000 l/ha, depending on phenological stage and/or conduction system.
	Acid rot ( <i>Penicillium sp.</i> ; <i>Aspergillus sp.</i> ; <i>Alternaria sp.</i> ; <i>Rhizopus sp.</i> ; <i>Cladosporium sp.</i> )		
	Secondary fungi ( <i>Aspergillus sp.</i> and <i>Penicillium sp.</i> )		
Stone Kernels (Cherry, Peach, Apricot, Plum, Nectarine and Almond)	<i>Alternaria</i> ( <i>Alternaria alternata</i> )	100 - 150 g/hl	It is recommended to apply in doses of 100 g/hl with low disease pressure and in doses of 150 g/hl with high pressure. Apply with predisposing conditions for the disease (free water or symptoms of the disease), from pint onwards. Suggested wetting of 1200 l/ha, depending on phenological stage and/or size of plants.
	Gray rot ( <i>Botrytis cinerea</i> )		It is recommended to apply in doses of 100 g/hl with low disease pressure and in doses of 150 g/hl with high pressure. Apply with predisposing conditions for the disease (free water or symptoms of the disease), from flowering onwards. Suggested wetting of 1000 l/ha, depending on phenological stage and/or size of plants.
Berries (Blueberry, Raspberry, Blackberry, Strawberry and Maqui)	Gray rot ( <i>Botrytis cinerea</i> )	100 - 150 g/hl (minimum dose of 0.5 kg/ha)	It is recommended to apply in doses of 100 g/hl with low disease pressure and in doses of 150 g/hl with high pressure. Apply with predisposing conditions for the disease (free water or symptoms of the disease), from flowering onwards. Suggested wetting of 500 l/ha, depending on phenological stage and/or size of plants.
Tomato, Potato, Tobacco, Eggplant, Chili and Paprika	Early blight ( <i>Alternaria solani</i> )	100 g/hl (minimum dose of 0.5 kg/ha)	It is recommended to apply with predisposing conditions for the disease (free water or symptoms of the disease), from pre-harvest onwards. Suggested wetting of 500 l/ha.
	Late blight ( <i>Phytophthora infestans</i> )	100 g/hl (minimum dose of 0.5 kg/ha)	It is recommended to apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of 500 l/ha.
Tomato	Gray rot ( <i>Botrytis cinerea</i> )	100 g/hl (minimum dose of 0.5 kg/ha)	It is recommended to apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of 500 l/ha.
Potato, Tobacco, Eggplant, Chili and Paprika	Gray rot ( <i>Botrytis cinerea</i> )	150 g/hl (minimum dose 0.6 kg/ha)	It is recommended to apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of 600 l/ha.
Kiwi	Gray rot or flower blight ( <i>Botrytis cinerea</i> )	100 -150 g/hl	It is recommended to apply in doses of 100 g/hl with low disease pressure and in doses of 150 g/hl with high pressure. Apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of about 1000 l/ha, depending on phenological stage, type of conduction and/or size of plants.
Citrus (Lemon, Orange, Grapefruit, Tangelo, Grapefruit and Mandarin)	Gray rot or flower blight ( <i>Botrytis cinerea</i> )	100 -150 g/hl	It is recommended to apply in doses of 100 g/hl with low disease pressure and in doses of 150 g/hl with high pressure. It is recommended to apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of about 1000 l/ha, depending on phenological state, type of conduction and/or size of plants.
Apple, Pear and Quince	Gray rot ( <i>Botrytis cinerea</i> ) and Bull's eye ( <i>Neofabraea spp.</i> )	100 - 150 g/hl	It is recommended to apply in doses of 100 g/hl with low disease pressure and in doses of 150 g/hl with high pressure. Apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of 1000 -1500 l/ha, depending on phenological stage, type of conduction and/or size of plants.
	Post-harvest: Bull's eye ( <i>Neofabraea spp.</i> )	100 - 150 g/hl	Post-harvest treatment: Apply with water in a shower in the packing line, prior to refrigerated storage, ensuring adequate coverage of the fruit. Apply in doses of 100 g/hl with low disease pressure and in doses of 150 g/hl with high pressure.
Lettuce, Spinach, Swiss Chard, Coriander and Chicory	Gray rot ( <i>Botrytis cinerea</i> ) and white rot ( <i>Sclerotinia sclerotiorum</i> )	150 g/hl (minimum dose of 0.6 kg/ha)	It is recommended to apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of 400 l/ha.
Carrot	White rot ( <i>Sclerotinia sclerotiorum</i> )	150 g/hl (minimum dose of 0.6 kg/ha)	It is recommended to apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of 400 l/ha.
Pumpkin, melon, watermelon, Cayota, pumpkin, cucumber and loofah	Gray rot ( <i>Botrytis cinerea</i> )	150 g/hl (minimum dose of 0.6 kg/ha)	It is recommended to apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of 600 l/ha.
Cabbage, Cauliflower, Romanesco, Brussels Sprouts, Radishes, Broccoli and Feed Cabbage	<i>Sclerotinia</i> ( <i>Sclerotinia sclerotiorum</i> ) <i>Alternaria</i> ( <i>Alternaria alternata</i> )	150 g/hl (minimum dose of 0.6 kg/ha)	It is recommended to apply with predisposing conditions for the disease (free water or symptoms of the disease). Suggested wetting of 400 l/ha.

**Preparation of the mixture:** Dilute in a container with water, the necessary amount of PUELCHE® (WP), shaking vigorously; then let it decant for a few minutes, before pouring into the application or irrigation equipment, which has previously been filled with water until the necessary level for application is reached.

The mixture should be used no later than 4 hours after preparation and kept in constant agitation.

**Incompatibility:** Incompatibility for joint applications with cupric compounds, fungicides, and antibiotics. Do not mix PUELCHE® (WP) with other pesticides without first performing a compatibility test. Check the manufacturer's compatibility list.

**Deficiency period:** There are no deficiency restrictions on recommended crops.

**Re-entry time:** There is no restriction on the time of re-entry of people or animals to the treated area.

**Phytotoxicity:** It does not present phytotoxicity in the recommended crops.

Do not use this product together with hydrogen peroxide. Compatible with water, monoammonium phosphate, Zinc and Kerosene. Nor use if there was a previous application of the pesticides described while they remain active in the target crop (check product coverage time).

**Non-toxic to bees, fish, mammals and aquatic organisms.**

**Use in organic and biodynamic agriculture:**

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



**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 Organic Agriculture**

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