



**POWDER** 

Improves plant nutrient uptake, growth, drought tolerance and vields

For indoor and outdoor agricultural crops, nursery, greenhouse, vineyard, orchard, landscape and turf



# CONTAINS NON-PLANT FOOD INGREDIENT

Soil-Amending Guaranteed Analysis ACTIVE INGREDIENT:

Total Microbe

Rhizophagus irregularis......2.000 spores/g

#### INERT INGREDIENTS:

Includes Maltodextrin, Kaolin Clay and Inactive Yeast

## Guaranteed by: Danstar Ferment AG /

Poststrasse 30 CH6300 ZUG Switzerland

#### Marketed and distributed by:

LALLEMAND PLANT CARE Lallemand Specialties Inc. / LALLEMAND PLANT CARE 6120 West Douglas Avenue Milwaukee, WI 53218 USA 1-844-590-7781

PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE ON THE BACK

NET WEIGHT: 2.2 lb (1 kg)

LALLEMAND



**LALRISE® MAX WP** is a robust inoculant, formulated as a wettable powder, containing spores of a carefully selected and versatile endomycorrhiza strain. It efficiently connects to the root system and forms an extensive underground network of hyphal filaments, which act as extensions reaching beyond the rhizosphere area. It increases plant absorption capacity (water, macro- and micro-nutrients), drought tolerance, yields and overall crop quality.

The MYCONNECT® TECHNOLOGY seal ensures compliance with quality standards from the LALLEMAND PLANT CARE mycorrhizae production system. MYCONNECT® TECHNOLOGY provides optimal active spores concentration per plant, offers superior quality and efficiency and provides a better rate of root colonization and product shelf-life. This technology uses a proprietary yeast fraction, acting to enhance the efficacy of the mycorrhiza active ingredient.

# **READ ALL DIRECTIONS BEFORE USING THIS PRODUCT**

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# STORAGE AND HANDLING RECOMMENDATIONS

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Do not expose to freezing or temperatures > 95 °F (> 35 °C).

Unused product should be disposed of in accordance with applicable federal, provincial or state, and municipal laws and regulatory guidelines.

Batch No.: See printing on the bag I Production date: See printing on the bag

#### Made in Estonia



**NET WEIGHT:** 2.2 lb (1 kg)



# PRECAUTIONS

# KEEP OUT OF REACH OF CHILDREN

The active ingredient in LALRISE® MAX WP is naturally occurring arbuscular mycorrhiza fungal spores. Persons allergic to bacteria and/or fungi and immune-deficient individuals should avoid using this product. Avoid exposure through inhalation, or to open wounds and eyes. Standard protective clothing and equipment including gloves, safety goggles and a NIOSH (The National Institute for Occupational Safety and Health) or MSHA (the Mine Safety and Health Administration) approved respirator are recommended during handling and storage. Use this product in well-ventilated areas.

In case of contact with skin or eyes, immediately flush exposed areas with a continuous gentle stream of clean water. In case of inhalation, remove person to fresh air. In case ingestion, do not induce vomiting but rinse mouth with water. Seek medical attention if discomfort or irritation develops. Medical treatment should be based on the judgment of the physician in response to reaction of the patient.

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Peel back for instructions. PRESS TO RESEAL.



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#### HOW IT WORKS

LALRISE® MAX WP is a robust inoculant, formulated as a wettable powder, containing spores of a carefully selected and versatile endomycorrhiza strain. It efficiently connects to the root system and forms an extensive underground network of hyphal filaments, which act as extensions reaching beyond the rhizosphere area. It increases plant absorption capacity (water, macro- and micro-nutrients), drought tolerance, yields and overall crop quality.

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# APPLICATION DIRECTIONS

#### 1. APPLICATION RECOMMENDATIONS

- · For best results, apply product under moist soil or growing media conditions, at early stages of plant growth and in close proximity to the roots.
- Can be applied via low volume spray, drench, micro- and drip-irrigation, directly to soil or growing media, to seeds, cuttings, bulbs, transplants or mature trees/shrubs.
- . Do not apply as foliar treatment or to dry soils. Optimal application temperature is between 50 °F and 86 °F (10 °C and 30 °C).
- · If using a sprayer or other irrigation systems, use filters with a minimum opening of 35 US Mesh (0.5 mm) with compatible nozzles to avoid clogging. In case a filter with a smaller opening size is required for your particular operational needs, please inquire to your local sales representative for specific recommendations before use.

#### 2. MIXING RECOMMENDATIONS

Gradually mix LALRISE® MAX WP with water while agitating. For optimal results, use immediately after preparing suspension. Continuously agitate while applying OR remix before each application. Do not keep suspension for longer than 24 hours.

#### 3. COMPATIBILITY

- 3.1 With chemicals: LALRISE® MAX WP can be tank-mixed with most fertilizer solutions and is compatible with most insecticides, herbicides and fungicides. Before mixing with pesticides, please inquire to your local sales representative for specific compatibility advice and recommendations.
- 3.2 With plant types: LALRISE® MAX WP is compatible with most plants and crops, except coniferous trees, members of the Brassicaceae (including but not

limited to canola, cabbage, cauliflower, broccoli, turnip), Ericaceae (including but not limited to blueberry, cranberry, rhododendron), Poligonaceae (including but not limited to buckwheat) and Chenopodiaceae (including but not limited to: spinach, chard, sugar beet, quinoa, mustard) families.

3.3 With other microbial-based products: LALRISE® MAX WP is compatible with other microbial technologies offered by Lallemand Plant Care. and some technologies may be able to synergize their effects on plants; certain recommendations may apply. If using this product in combination with another microbial product, please inquire to your local sales representative for more information.

#### 4. APPLICATION TIMING

Apply at the sowing, seedling or transplant stage. Apply once per crop cycle.

#### 5. APPLICATION RATES AND INSTRUCTIONS FOR USE

#### 5.1 For open field agricultural use (ex.: vegetable, herb, tuber, root or bulb crops)

- 5.1.1 Seed treatment, including cuttings and bulbs: Gradually mix the product in an adequate volume of water to cover the desired seed type and quantity. Apply the slurry to seeds while mixing, until evenly coated and dry.
- 5.1.2 Micro-irrigation, in-furrow spray or transplant starter solution: Gradually mix the product in an adequate volume of water to treat the desired area, based on individual operational needs. Constant agitation of the tank is required.
- 5.1.3 Soil drench: Gradually mix the product in an adequate volume of water to treat the desired area. Include product towards end of drenching cycle to minimize product dilution. Apply to the point of wetness. Constant agitation of the tank is required.

Application rate<sup>1</sup>: 3.0 – 7.0 oz. per acre; 200 – 500 g per hectare

#### 5.2 For nursery, greenhouse, vineyard, orchard and landscape use (ex.: trees, shrubs, vine crops, ornamentals, perennials and turf)

5.2.1 Drench or low volume spray: Determine the quantity of product necessary to treat the desired area or number of plants, based on the type of container used. Gradually mix the measured product in an adequate volume of water, based on operational needs. Constant agitation of the tank is required. Treat to the point of wetness, ensuring that all the product has been applied. Avoid run-offs as much as possible.

#### Application rate1:

- For seedling trays: 3.5-7.0 oz. per 100 ft<sup>2</sup>; 100-200 g per 10 m<sup>2</sup> of seedling tray area
- Raised beds: 3.5-7.0 oz. per 1,000 ft2; or 100-200 g per 100 m2 of propagation bed area
- For pots: 0.005 0.1 oz.; 0.1 2.5 g per plant (see **Table 1** below)

**Table 1.** Application rate based on container/pot volume.

US Customary Units		Metric	
Container size (gal.)	Quantity per plant (oz.)	Container size (L)	Quantity per plant (g)
< 1	0.005 - 0.01	< 4	0.1 – 0.25
1 – 3	0.01 - 0.02	5 – 11	0.25 - 0.5
4-6	0.02 - 0.04	12 – 24	0.5 – 1.0
7 – 15	0.04 - 0.08	25 – 60	1.0 – 2.0
> 15	0.08 - 0.1	> 60	2.0 – 2.5

5.2.2 Mixing with growing media: Determine the quantity of product necessary to treat the desired growing media quantity based on the container type that will be used. Gradually mix the measured quantity of product in the adequate volume of water to obtain the desired moisture level in the growing media. Constant agitation of the tank is required to ensure optimal homogeneity. Mix the diluted product with the growing media until evenly distributed.

#### Application rate:

- For seedling trays and plugs: 7 14 oz. per yd³ (30 ft³); 250 – 500 g per m³ of growing media
- For pots: 0.75 1.5 oz. per yd3 (30 ft3); 25 50 g per m3 of growing media

5.2.3 Transplanting in soil or growing media: Gradually mix the product in an adequate volume of water to treat the desired number of plants/trees. Constant agitation of the tank is required. Apply the diluted product directly to the root system or on the side/bottom of the planting hole. "Alternatively, the product can be applied dry in the planting hole, without prior dilution.

#### Application rate1:

- For berries and other small fruits: 0.0002 0.004 oz.; 0.005 – 0.1 g per plant OR 0.5 – 1 lb per acre; 0.5 – 1 kg per hectare
- For vine crops: 0.004 0.02 oz.; 0.1 0.5 g per plant OR 0.5 1 lb per acre; 0.5 1 kg per hectare
- For fruit and nut tree plantations: 0.02 0.1 oz.; 0.5 2.5 g per plant OR 0.5 1 lb per acre; 0.5 1 kg per hectare
- For urban trees: 0.05 1.5 oz.; 1.25 40 g per tree (see **Table 2** below)

Table 2. Application rate for transplanting urban trees based on caliper.

US Customary Units		Metric	
Caliper (in.)	Quantity per tree (oz.)	Caliper (mm)	Quantity per tree (g)
1.0 – 1.5	0.05 - 0.1	25 – 40	1.25 – 2.5
1.75 – 2.0	0.1 – 0.2	41 – 50	2.5 – 5
2.25 – 2.5	0.2 - 0.4	51 – 65	5 – 10
2.75 – 3.0	0.4 – 0.8	66 – 75	10 – 20
3.25 – 4.0	0.8 – 1.0	76 – 100	20 – 25
> 4.25	1.0 – 1.5	> 100	25 – 40

5.2.4 Soil injection probes: Gradually mix the product in an adequate volume of water to treat the desired number of plants/trees. The application rate can be divided by the number of injection holes used. Ensure equal distribution around the root zone. Injection sites should be evenly spaced under dripline of canopy, inject prepared solution into the soil at least three inches deep for shrubs and six inches deep for trees. Pump pressure should not exceed 200 psi.

**Application rate<sup>1</sup>:** 0.05 - 1.5 oz.; 1.25 - 40 g per tree (see **Table 2** above)

**5.2.5 Drip-irrigation:** Gradually mix the product in an adequate volume of water to treat the desired number of plants, based on individual operational needs. Constant agitation of the tank is required.

Application rate<sup>1</sup>: 0.5 – 1 lb per acre; 0.5 – 1 kg per hectare

#### 5.3 For turf use

**5.3.1 Hydroseeding or sod laying:** Gradually mix the product in an adequate volume of water to treat the desired surface. Constant agitation of the tank is required. Apply to bare soil with seeds, sod laying area or root zone.

**Application rate** $^1$ : 0.1 - 0.2 oz. per 1,000 ft $^2$ ; 2.5 - 5 g per 100 m $^2$  OR 0.25 - 0.5 lb per acre; 0.25 - 0.5 kg per hectare of sowing or sod laying area

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LALRISE® MAX WP uses patented technology and is a registered trademark of Danstar Ferment AG / LALLEMAND PLANT CARE.

Information regarding the contents and levels of metals in this product is available on the internet at aapfco.org/metals.html.

#### LIMITED WARRANTY

Danstar Ferment AG / LALLEMAND PLANT CARE ("Danstar") warrants that this inoculant (the "Product"), will contain the minimum number of live cells per milliliter/ gram as specified on the Product label at the time the Product is first sold by Danstar. Danstar makes no warranty as to the Product's viability or performance since the storage, use and application of the Product and growing condition are beyond the control of Danstar.

To the extent permitted by applicable law, Danstar makes no other warranties of any kind and hereby disclaims all other warranties, whether oral or written, expressed or implied, including without limitation, the implied warranties of the merchantability and fitness for a particular purpose and the warranty of non-infringement. Buyer of the Product assumes the risk to persons and real or personal property arising from the use, application or handling of the Product or seeds treated with the Product.

Buyer's exclusive remedy for any and all losses, injury or damages resulting from a breach of this Limited Warranty shall be, at the election of Danstar, either the price paid by buyer for the Product purchased directly from Danstar, or the replacement of such quantity of the Product. Danstar shall not be responsible for any liabilities, damages, expenses, costs or other losses, including without limitation, loss of profits suffered in connection with the use of the Product and in no event shall Danstar be liable for any incidental, consequential, special or punitive damages to the buyer or any third party.

Buyers of the Product are deemed to have accepted the terms of this Limited Warranty upon opening the container containing the Product, requesting the Product to be applied to the seed, or use of seed to which the Product has been applied, whichever is earlier. The terms of this Limited Warranty may not be varied by any oral or written agreement.



In some cases, application rate may vary based on plant size, plant density, soil type, climate zone or combination with another microbial technology from Lallemand Plant Care. Please inquire to your local sales representative for more information about specific application rate recommendations.