

# Improves plant nutrient uptake and drought tolerance, therefore may increase growth and yields

For: Indoor and outdoor agricultural crops Nursery and greenhouse Vineyard and orchard Landscape and turf

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT

#### **CONTAINS NON-PLANT FOOD INGREDIENT**

# Soil-Amending Guaranteed Analysis ACTIVE INGREDIENTS:

Total Microbe

10% Inactivated Yeasts (improve root colonization)

#### INERT INGREDIENT:

Kaolin Clay

#### 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 improves plant absorption capacity (water, macro- and micro-nutrients) and drought tolerance, and therefore may increase yields and overall crop quality.

The MYCONNECT® TECHNOLOGY seal ensures compliance with quality standards from the LALLEMAND PLANT CARE mycorrhizae production system. MYCONNECT® TECHNOLOGY optimizes 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.

#### 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 nozzies 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 LALRISES 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 watness. 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. Gladually 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 rate<sup>1</sup>:

- For seedling trays: 3.5-7.0 oz. per 100 ft²; 100-200 g per 10 m² 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:

- $\bullet$  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
- $\bullet$  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':** 0.1 – 0.2 ez. per 1,000 ft²; 2.5 – 5 g per 100 m²

OR 0.25 – 0.5 lb per acre; 0.25 – 0.5 kg per hectare of sowing or sod laying area

#### 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 immunedeficient 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 wellventilated 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.

#### STORAGE AND HANDLING RECOMMENDATIONS

Store in a cool, dry location in the original, unopened packaging. Use before expiration date stated on the package. The expiration date is valid only for unopened bags stored under cool, dry conditions. Open packages must be resealed and kept under the same conditions for no more than six months.

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.

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 http://www.aapfco.org/metals.html

#### LIMITED WARRANTY

Danstar Ferment AG. / LALLEMAND PLANT CARE ("Danstar") warrants only that this product conforms to the product description on this label and is reasonably fit for the purposes set forth in the Directions for Use when used in accordance with them. However, ineffectiveness or other unintended consequences may result because of such factors as the use, storage or handling of the product contrary to the label of such factors as the use, storage or handling of the prinstructions, all of which are beyond the control of Danstar.

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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.