

# LALSTOP K61WP



Biofungicide – For turf and agronomic, vegetable and ornamental crops

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT

CAUTION – KEEP OUT OF REACH OF CHILDREN

## Soil-Amending Guaranteed Analysis

### CONTAINS NON-PLANT FOOD INGREDIENT ACTIVE

INGREDIENT: *Streptomyces* sp. Strain K61\* ..... 35.0%

Other Ingredients: ..... 65%

Total: ..... 100%

\* Contains a minimum of 10<sup>8</sup> cfu (colony forming units) per 1g of product.

EPA Reg. No.: 64137-5

## FIRST AID

	Move person to fresh air.
<b>If Inhaled</b>	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth to mouth if possible.  Call a poison control center or doctor for further treatment advice.
<b>If in Eyes</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes.  Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.  Call a poison control center or doctor for treatment advice.
<b>If on Skin or Clothing</b>	Take off contaminated clothing.  Immediately rinse skin with plenty of water for 15-20 minutes.  Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information, spills, leaks, fire, exposure or accidents.

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Caution:** Harmful if inhaled. Avoid breathing dust or spray mist. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, protective eyewear, and a NIOSH-approved particulate respirator with any N, P or R filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. (Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.) Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions are given for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### USER SAFETY RECOMMENDATIONS

Users should:

- Immediately remove clothing/PPE if pesticide gets inside. Then thoroughly wash and put on clean clothing.
- Immediately remove PPE after handling this product. Wash the outside of gloves before removing. As soon as possible, thoroughly wash and change into clean clothing.

### ENVIRONMENTAL HAZARDS

**For terrestrial uses:** Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

**Net Weight:** 2 lbs.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours. Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water) is:

- Coveralls
- Protective eyewear
- Waterproof gloves
- Shoes plus socks
- NIOSH-approved particulate respirator with any N, P or R filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries and greenhouses. Do not enter treated area without protective clothing until sprays have dried.

## MIXING INSTRUCTIONS

To make a suspension of LALSTOP® K61 WP, mix in a small volume of water, such as 0.25-1.0 gallon, and let stand for approximately 30 minutes. Agitate as needed to evenly disperse LALSTOP® K61 WP before diluting to final volume. Do not tank mix LALSTOP® K61 WP with any pesticides or with concentrated fertilizers.

### TURF, FIELD CROP, ORNAMENTAL, VEGETABLE, MUSHROOM AND TREE AND FOREST SEEDLING USES

LALSTOP® K61 WP can be used for the control of seed rot, root and stem rot and wilt diseases caused by *Fusarium*, *Alternaria* and *Phomopsis* in ornamentals, vegetables, tobacco\*, cotton\*, corn, peanuts\*, soybeans, wheat, sorghum, beans, peas, and tree and forest seedlings. LALSTOP® K61 WP can also be used for the control of seed rot, root rot and stem rot and wilt diseases caused by *Fusarium* in turf.

LALSTOP® K61 WP has shown suppression of *Botrytis* Gray Mold and root rots caused by *Aspergillus*, *Pythium*, *Phytophthora* and *Rhizoctonia*. LALSTOP® K61 WP has shown suppression of Bacterial Spot (*Xanthomonas gardneri*), Early Blight (*Alternaria solani*) and Anthracnose (*Colletotrichum coccodes*) on greenhouse Solanaceous plants; suppression of Septoria on tree seedlings in the field\*; and control of Dry Bubble (*Lecanicillium fungicola*) in mushrooms in mushroom cultivation\*.

LALSTOP® K61 WP can be used as a seed treatment for seed or soil-borne damping off and early root rot of vegetables, herbs, tobacco\*, legumes, corn, cotton\*, peanuts\*, wheat, sorghum, trees, conifers and ornamentals planted in the field or greenhouse.

**\*NOT FOR USE IN CALIFORNIA.**

## APPLICATION RATES

Refer to the table below for specific application rates.

Application	Target	Unit of Measure	Value for Given Unit of Measure per LALSTOP® K61 WP Package LALSTOP® K61 WP Package Size			
			0.07 oz. (2 g)	0.176 oz. (5 g)	0.88 oz. (25 g)	3.53 oz. (100 g)
Dry seed treatment	Lettuce	Pound seeds	2	5	25	100
	Ornamentals, dill, leguminous plants, parsley, root crops, spinach, tomatoes, corn, tobacco*, cotton*, peanuts*, soybeans, wheat, sorghum, beans, peas, trees and conifers		1	2	10	40
	<i>Brassica</i> species (Cole crops), herbs, leeks and onions		0.5	1.5	7.5	30
Seed soak and transplant or cutting dip	Seeds, transplants and cuttings	Gallon water	0.5-5	1.25-12.5	6.25-62.5	25.250
Incorporation	Growing medium	Cubic yard	1-2	2.5-5	12.5-25	50-100
Soil spray or drench	Bedding plants, foliage plants, flowering plants, trees, conifers, forest seedlings, woody ornamentals, tobacco*, cotton*, legumes, vegetable transplants or vegetables grown for production	Square foot	100-200	250-500	1250-2500	5000-10000
	Small seedlings		400-800	1000-2000	5000-10000	20000-40000
	Band or in-furrow application and side-dress application		200-400	500-1000	2500-5000	10000-20000
	Mushrooms*		50-400	125-1000	625-5000	2500-20000
	Turf		400-500	1000-1200	5000-6000	20000-24000
Drip irrigation	Ornamental and vegetable plants	Square foot	100-200	250-500	1250-2500	5000-10000
		Plant number	80-400	200-1000	1000-5000	4000-20000
	Mushrooms		50-400	125-1000	625-5000	2500-2000
	Field crops (such as tobacco*, cotton*, corn, peanuts*, soybeans, wheat, sorghum, beans, peas, and tree and forest seedlings)	Square foot	100-200	250-500	1250-2500	5000-10000
Spray to suppress <i>Botrytis</i>	Ornamental and vegetable plants	Gallon water	5	12.5	62.5	250

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## SEED TREATMENT

- LALSTOP® K61 WP can be applied as a treatment to vegetable, herb, tobacco\*, corn, cotton\*, peanut\*, wheat, sorghum, ornamental, legume, tree and conifer seeds.
- LALSTOP® K61 WP may be dry mixed with seed in a planter box or other suitable mixing container. Fill the planter box or container half full of seed, add half the required amount of LALSTOP® K61 WP and thoroughly mix with a stick or paddle. Add remainder of seed and LALSTOP® K61 WP and thoroughly mix.
- To mix in a small container such as a jar, add the required amount of LALSTOP® K61 WP and seeds, shake until the seeds become coated with powder, then pour into planter box.
- Sow treated seed without delay, but at least within a week if kept cool and dry.
- Do not treat damp or wet seed with LALSTOP® K61 WP powder.
- Do not treat seeds of Dusty Miller or melons with LALSTOP® K61 WP.

LALSTOP® K61 WP has also been proven effective when used as a 0.01% to 0.1% by weight seed soak where soaking seed for 5-15 minutes immediately prior to planting is practical. Because many ornamentals and vegetables have not been tested using a seed soak, first check emergence on a small quantity of seed.

## INCORPORATION IN POTTING MEDIA

LALSTOP® K61 WP can be mixed into potting media. Apply LALSTOP® K61 WP in a concentrate spray to the growth media when the media is being mechanically blended or rake in by hand in beds. It is important that LALSTOP® K61 WP be evenly incorporated to assure best performance. Use potting media containing LALSTOP® K61 WP within 2 days after incorporation. Do not store above 85°F. A drench or spray application of LALSTOP® K61 WP is recommended within 2-6 weeks as described below under Soil Spray or Drench Applications.

## TRANSPLANT DIP OR CUTTING DIP

LALSTOP® K61 WP may be applied by dipping roots of transplants or cuttings (including bare root seedlings), such as carnations, in a suspension shortly before planting. Use a suspension of 0.01% to 0.1% by weight. Use the higher rate for high disease pressure.

## SOIL SPRAY OR DRENCH APPLICATION

LALSTOP® K61 WP may be applied to bedding plants, foliage plants, flowering plants, cotton\*, tobacco\*, legumes, trees, conifers, forest seedlings, woody ornamentals, vegetable transplants or vegetables grown for production. Examples of ornamental crops include carnation, gerbera, African violet, cyclamen, geranium, pine and others. Examples of vegetable crops include cabbage, cucumbers, melons, peppers, tomatoes and others.

- **Soil Spray/Drench** – Uniformly apply LALSTOP® K61 WP over the area to be treated. For example, use 0.176 oz./1.3 gal./400 sq.ft. Follow with normal irrigation or sufficient water (1/8-1/4 inch) within 6 hours to move LALSTOP® K61 WP into the plant root zone.
- **Small Seedling Production** – Uniformly apply LALSTOP® K61 WP over the area to be treated.

- Repeat spray or drench application every 2-6 weeks or as needed for disease control. Use the higher rate and more frequent application for high disease pressure and for larger plants.

## BAND OR IN-FURROW APPLICATION

Apply LALSTOP® K61 WP shortly before or at the time of planting in 0.5-1 pints of water/treated 100 sq.ft. A 7-inch band is recommended for banded applications. Lightly incorporate into the top 2-3 inches of soil. An in-furrow application of LALSTOP® K61 WP may also be made at the same rates. Spray all the soil that surrounds and covers the seed.

## SIDE-DRESS APPLICATION

Apply LALSTOP® K61 WP in 0.5-1 pints of water/treated 100 sq.ft. as a side-dress application to the plant bed. Direct spray to base of plant and root zone. Repeat treatment every 2-4 weeks or as needed.

## BOTRYTIS SUPPRESSION

A 0.1% by weight (0.14 ounces/gallon of water) LALSTOP® K61 WP spray will help suppress Botrytis infection. Direct spray to susceptible leaves, flowers and fruits to the point of run-off. Apply every 2-3 weeks or as needed depending on disease pressure.

## CONTROL OF DRY BUBBLE (*LECANICILLIUM FUNGICOLA*) IN MUSHROOM HOUSES\*

As a direct spray or soil drench, apply LALSTOP® K61 WP at a rate of 0.18 – 1.40 ounces//1000 sq. ft. in 20 – 30 gallons of water/1000 sq. ft. depending on disease pressure. Repeat as needed for control.

## SUPPRESSION OF BACTERIAL SPOT (*XANTHOMONAS GARDNERI*), EARLY BLIGHT (*ALTERNARIA SOLANI*) AND ANTHRACNOSE (*COLLETOTRICHUM COCCODES*) ON GREENHOUSE SOLANACEOUS PLANTS

Apply LALSTOP® K61 WP at a rate of 0.13 ounces/gallon of water to suppress Bacterial Spot (*Xanthomonas gardneri*) and Early Blight (*Alternaria solani*) in greenhouse tomatoes and other Solanaceous crops. Apply LALSTOP® K61 WP at a rate of 0.13 ounces/26 gallons of water for the suppression of Anthracnose (*Colletotrichum coccodes*) in greenhouse tomatoes and other Solanaceous crops. Spray to the point of runoff. Repeat every 2-6 weeks or as needed.

## SUPPRESSION OF *SEPTORIA* ON TREE SEEDLINGS\*

Apply 0.05% by weight (0.07 ounces/gallon of water) LALSTOP® K61 WP water suspension on tree seedlings after emergence and at nursery stage by foliar spraying. Spray to the point of runoff. Repeat every 4 weeks or as needed.

## TURF

Apply LALSTOP® K61 WP in 1-3 pints of water/100 sq.ft. Repeat treatment every 4 to 6 weeks or as needed depending on disease pressure.

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## DRIP IRRIGATION - CHEMIGATION

### General

1. Apply LALSTOP® K61 WP only through drip irrigation system(s). Do not apply LALSTOP® K61 WP through any other type of irrigation system.
2. A pesticide supply tank is recommended. Continuous agitation of LALSTOP® K61 WP in the supply tank is required. Begin application of LALSTOP® K61 WP during the beginning of irrigation.

### For Agronomic Crops

- Apply in sufficient water to move into root zone.
- Repeat every 2-6 weeks or as needed for disease control.

### For Vegetable and Ornamental Crops, and Mushrooms

- Use higher rate and more frequent application for large plants and pots, and for high disease pressure.
  - Apply in sufficient amount of water to move into root zone. Repeat every 2-6 weeks or as needed for disease control.
3. Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
  4. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
  5. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise.

### Special Instructions for Use of Public Water Sources

1. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
2. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
3. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

4. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
5. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
6. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
7. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

### Special Instructions for Drip Irrigation (Chemigation) Systems

1. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** LALSTOP® K61 WP consists of living microbes that are packed in moisture- and air-proof unit packages. Store in a cool (below 46°F, 8°C), dry place. Use all contents in packet the same day. Do not store opened packets since product will lose its activity.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Handling:** Nonrefillable container; do not reuse or refill this container. Completely empty packet into application equipment, then offer for recycling, if available; otherwise, dispose of empty packet in a sanitary landfill or by incineration.

## NOTICE TO USER

Lallemand Plant Care, a business unit of Lallemand Specialties Inc. ("Lallemand"), 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 instructions, all of which are beyond the control of Lallemand. To the extent consistent with applicable law, Lallemand shall not be liable for indirect or consequential damages resulting from the use, storage or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LALLEMAND MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

### Manufactured for:

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