

LALSTOP K61^{WP}

Biofungicide

Active ingredient: *Streptomyces* K61

Product (minimum): 1×10^8 cfu/g

MAPP 19571



WETTABLE POWDER
(WP)

LALSTOP K61 WP is a biofungicide: a 25% wettable powder containing a 1×10^8 cfu/g minimum product of the microorganism *Streptomyces* strain K61, a selected strain of a naturally occurring soil microbe. The product is not genetically manipulated.

LALSTOP K61 WP is a biofungicide for the moderate control of damping-off, root and stem rot and wilt caused by e.g. *Fusarium* sp. and *Pythium* sp. on vegetables, ornamentals and herbs grown in greenhouses (protected crops). LALSTOP K61 WP uses consist of treatments of the growth substrates as well as dry seed treatments and dipping treatments of cuttings and onion sets before planting. LALSTOP K61 WP is applied to growth substrates via irrigation systems, as soil drench, spraying, incorporation or via Nutrient Film Technique (NFT).

Approval holder:
DANSTAR FERMENT A.G.
LALLEMAND PLANT CARE
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CH-6300 ZUG
SWITZERLAND

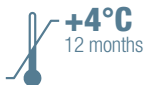
Marketing company:
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Production batch identification number and date:

See the print on the packaging.



NET WEIGHT: **100 g**



LALLEMAND

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IMPORTANT INFORMATION
FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL BIOFUNGICIDE.
USER: Professional.

Crop	Application method	Maximum individual dose	Maximum number of treatments
All edible crops (protected), all non-edible crops (protected)	Incorporated into growing medium/soil	10 g product/m ³	1 per batch of growing medium
	As drench or spray treatment	1 kg product/ha	2 per crop (see Other Specific Restriction 1)
All edible crops (protected) (seed), all non-edible crops (protected) (seed)	As dry seed treatment	8 g product/kg of seeds	1 per batch of seeds (see Other Specific Restrictions 2 to 5)
Aubergine (protected), courgette and summer squash (protected), cucumber (protected), melon (protected), pepper (protected), sweetcorn (protected), tomato (protected), watermelon (protected), winter squash and pumpkin (protected)	As drench or spray treatment	1 kg product/ha	4 per crop (see Other Specific Restriction 1)
	Via drip irrigation	10 g product/1,000 plants	4 per crop (see Other Specific Restriction 1)
Angelica (protected), balm (protected), basil (protected), bay (protected), caraway leaves (protected), celery leaves (protected), chervil (protected), coriander leaves (protected), cress (protected), dill leaves (protected), edible flowers (protected), endive (protected), fennel leaves (protected), herb - other (protected), hyssop (protected), lamb's lettuce (protected), land cress (protected), lettuce (protected), lovage leaves (protected), marjoram (protected), mint (protected), oregano (protected), parsley (protected), rocket (protected), rosemary (protected), sage (protected), salad burnet (protected), savory (protected), spinach (protected), spinach beet (protected), sweet cicely (protected), tarragon (protected), thyme (protected), watercress (protected)	Incorporated into growing medium/soil	10 g product/m ³	1 per batch of growing medium
	As drench or spray treatment	1 kg product/ha	3 per crop (see Other Specific Restriction 1)
	Via hydroponic system	1g product/1,000 plants	1 per crop
Ornamental plant production (protected)	Incorporated into growing medium/soil	10 g product/m ³	1 per batch of growing medium
	As drench or spray treatment	1 kg product/ha	4 per crop (see Other Specific Restriction 1)
	Via drip irrigation	10 g product/1,000 plants	4 per crop (see Other Specific Restriction 1)
	As a root dip prior to planting	10 g product/100 l water	1 per batch
Bulb onion (protected), garlic (protected), salad onion (protected), shallot (protected)	As dipping or soaking treatment	10 g product/100 l water	1 per crop

Other Specific Restrictions:

- (1) A minimum interval of 21 days must be observed between applications.
- (2) Use as a dry seed treatment is limited to use on vegetable or herb seeds and seeds of crops grown for ornamental purposes only.
- (3) Treated seed must not be used for food or feed.
- (4) Sacks containing treated seed must not be re-used for food or feed.
- (5) Sacks containing treated seed must be labelled with the safety precautions and PPE requirements given on the product label.

Soil incorporation not to be used for fruiting vegetables.

This product may only be used in greenhouses.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the product label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

Disease control

LALSTOP K61 WP has multiple modes of action against damping-off, root and stem rot and wilt caused by e.g. *Fusarium* sp. and *Pythium* sp. on vegetables, herbs, ornamental crops, seeds and onion and garlic sets (protected):

- *Streptomyces* K61 deprives plant pathogenic fungi of living space and nourishment by colonizing plant roots or foliage in advance of the pathogens.
- *Streptomyces* K61 acts as a hyperparasite on harmful fungi by producing enzymes, which break down the cell walls of the pathogenic fungi.

Crop recommendations

LALSTOP K61 WP is for use on vegetables, seedlings, ornamental crops, herbs, onion and garlic sets as well as on seeds (protected).

Best conditions for product

LALSTOP K61 WP should be used preventatively, so that *Streptomyces* K61 has enough time to colonize plant roots or foliage prior to the pathogens.

CROP SPECIFIC INFORMATION FOR GROWING MEDIA APPLICATIONS

LALSTOP K61 WP may be applied by spraying or drenching, through drip irrigation, by mixing into the growing medium or by dipping or dry seed treatment.

Timing

LALSTOP K61 WP should be used preventatively. Treat growing media at sowing, transplanting and/or planting stage. Repeat the treatment at the intervals of 3-6 weeks. Use the shorter interval under conditions of moderate to high disease pressure.

Mixing and Application

LALSTOP K61 WP must always be used as an aqueous suspension. First cream the LALSTOP K61 WP powder with a small amount of water (e.g. 1 litre), then agitate carefully and let stand for approximately 30 minutes until evenly mixed, after which dilute to the final concentration. The aqueous LALSTOP K61 WP solution should be used on the day of preparation. Drench treatments may be applied via drip irrigation systems, hydroponic troughs or other subirrigation systems through a mixing tank or via a separate injection pump.

Always adjust the volume of water according to the moisture content of the growing media. Use the higher rate of LALSTOP K61 WP in the case of a risk for high disease pressure, high crop density or big root volume. The lower rate is used when mild disease infection is expected or for low crop density and small root volume.

Drench of fruiting vegetables and ornamentals: apply 2 g to 10 g of LALSTOP K61 WP per 100 m² in beds or 5 g to 20 g per 1,000 plants.

Spraying or drenching of small seedlings: use 2 - 10 g of LALSTOP K61 WP/100 m².

Drench of lettuce and herbs via hydroponic system: apply 1g LALSTOP K61 WP per 1,000 plants.

Dipping of individual rooted ornamental cuttings, root balls and pot plants: dip in 0.01% LALSTOP K61 WP suspension (that is 1 g LALSTOP K61 WP per 10 l water) just before planting.

Dipping (soaking) of onion and garlic sets: soak the sets in 0,01% LALSTOP K61 WP suspension (that is 1 g LALSTOP K61 WP per 10 l water) for 15 minutes just before planting.

Growing media incorporation: When incorporating LALSTOP K61 WP into the growing medium use 1 g - 10 g of LALSTOP K61 WP per 1,000 litres of the medium. Mix the powder first with water in order to ensure a uniform distribution of the product into the medium.

Dry seed treatment: apply LALSTOP K61 WP powder as dry seed treatment on seeds of vegetables, herbs and ornamentals. Blend the LALSTOP K61 WP powder uniformly with seeds according to the following doses: Cabbage, onion, leek and herbs: 8 g LALSTOP K61 WP/kg of seeds; lettuce: 2 g LALSTOP K61 WP/kg of seeds; other leafy vegetables, root crops, tomato, pepper, cucumber and leguminous plants: 5 g LALSTOP K61 WP/kg of seeds; Gerbera: 2 g LALSTOP K61 WP/kg of seeds, and other ornamental plants: 5 g LALSTOP K61 WP/kg of seeds. Sow the treated seeds within a week after the treatment. Store treated seeds in a cool place below +8°C.

COMPATIBILITY

LALSTOP K61 WP is a biological fungicide compatible with most chemical pesticides but as LALSTOP K61 WP may be affected by residues or subsequent applications of other pesticide products, it is recommended to consult the manufacturer or distributor regarding compatibility of other chemical or microbial products within a pest or disease control programme. Do not tank-mix LALSTOP K61 WP with chemical pesticides or with concentrated fertilizer solutions. LALSTOP K61 WP does not harm beneficial insects and can be used in integrated pest and disease control systems. LALSTOP K61 WP has been used on a wide range of crops under a range of conditions and no phytotoxicity has been observed.

RESISTANCE

LALSTOP K61 WP has not been reported to have any disease resistance. However, it is good practice to use such products as components of Integrated Pest Management systems, alternating with other control measures. This is particularly important for sequential crops.



SAFETY PRECAUTIONS

- **Do not breath dust.**
- **Wear protective gloves/protective clothing/eye protection/face protection**
- **IF ON SKIN:** Wash with plenty of soap and water
- **If exposed or if you feel unwell:** Call a POISON CENTER or doctor/physician.

Operator protection

- Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment: Operators must wear suitable protective clothing (coveralls), suitable protective gloves and suitable respiratory protective equipment* when handling the product or applying the product. *Disposable filtering facepiece respirator to at least EN149 FFP3 or equivalent. However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

Environmental protection

- Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

Storage and disposal

- Store in a dry place and in a closed container for a maximum of 12 months at a temperature not exceeding +4°C.
- Dispose of contents and container: in accordance with local and national regulations.