



BIOFUNGICIDE

Streptomyces sp. strain K61

LALSTOP K61^{WP}

Broad spectrum disease controlling biofungicide

Fight effectively against damping-off and root or wilt diseases

LALSTOP K61 WP contains a high concentration of spores and mycelia of *Streptomyces* sp. K61, an actinobacterium with disease controlling properties present in certain soils.



 WETTABLE POWDER

MODES OF ACTION

The active bacteria *Streptomyces* K61 operates through several useful modes of action:

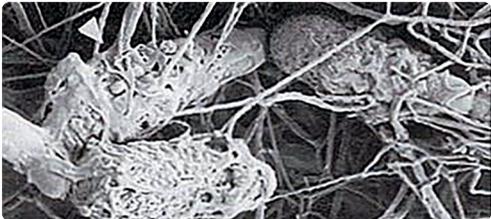
1 **COMPETITION:**
depriving pathogenic fungi of living space and nourishment by colonising plant roots.

Lettuce root colonised by Streptomyces K61



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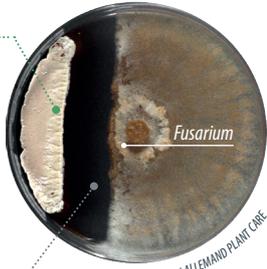
2 **HYPERPARASITISM:**
disrupting and destroying cell walls of plant pathogens.



Streptomyces K61 destroying cell walls of a pathogenic fungi

3 **ANTAGONISM:**
producing metabolites that inhibit plant pathogens in a number of ways.

Antagonistic activity of Streptomyces K61 against Fusarium sp. (isolated from tomatoes)



Streptomyces K61

Fusarium

Zone of inhibition

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BENEFITS

- **Against a wide range of soil-borne plant pathogens** that cause damping-off, seedling death, crown-rot, base-rot, wilt and root-rot disease.

ADVANTAGES

- **Broad spectrum of use.**
- **Several modes of action:** low risk of resistance.
- **Persistence of action:** 3 weeks in the soil and growing media.
- **Environmental profile:**
 - without toxicological classification.
 - usable in organic farming and zero residue programmes.

APPROVED USES

Crops	Maximum individual dose	Maximum total dose	Maximum number of treatments	Latest time of application
All edible crops (protected) (seed), all non-edible crops (protected) (seed)	8 g product/kg seed used as a dry seed treatment	—	1 per batch see Other Specific Restrictions 2	—
All edible crops (protected), all non-edible crops (protected)	10 g product/m ³ soil as a soil incorporation only before transplanting seedlings OR 1 kg product/ha	—	1 per batch OR 2 per crop see Other Specific Restrictions 1	—
Protected Edible Fruiting Crops	1 kg product/ha OR 10 g product/1000 plants applied via drip irrigation	—	4 per crop See Other Specific Restrictions 1 OR 4 per crop See Other Specific Restrictions 1	—
Protected Edible Leafy & Fresh Herb Crops	1 kg product/ha OR 10 g product/m ³ soil as soil incorporation OR 1 g product/1000 plants when applied via nutrient film technique (NFT) in a hydroponic system	—	3 per crop See Other Specific Restrictions 1 OR 1 per batch OR 1 per crop	—
Protected Edible Bulb Crops	10 g product/100 L water as a bulb soak prior to planting	—	1 per crop	—
Ornamental plant production (before planting)	10 g product/100 L water as a root dip prior to planting	—	1 per batch	—
Ornamental plant production (protected)	10 g product/m ³ soil as a soil incorporation OR 1 kg product/ha OR 10 g product/1000 plants when applied via drip irrigation	—	1 per batch OR 4 per crop See Other Specific Restrictions 1 OR 4 per crop See Other Specific Restrictions 1	—

Other specific restrictions:

- (1) A minimum interval of 21 days must be observed between applications.
- (2) 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.
- (6) This product may only be used in greenhouses.

Information provided above is compiled from details within the AUTHORISATION FOR A PLANT PROTECTION PRODUCT (PPP), PPP REGULATION (EC) N°1107/2009, Authorisation N°1985 of 2020, MAPP N°19751 (Registration holder: Danstar Ferment AG).

COMPATIBILITY

LALSTOP K61 WP is compatible with many chemical pesticides and can be used in Integrated Pest Management (IPM) programmes.

Ask your distributor before mixing with plant protection products.

Authorization holder: DANSTAR FERMENT A.G.

Poststrasse 30,
CH-6300 Zug
SWITZERLAND

CHARACTERISTICS

- **ACTIVE INGREDIENT:** 5x10⁸ CFU*/g (25% w/w) of spores and mycelia of *Streptomyces* K61
*CFU: Colony Forming Unit. Unit of measure for living microorganisms able to multiply
- **FORMULATION:** wettable powder (WP)
- **PACKAGING:** 25 and 100 g
- **STORAGE:** 12 months in a cool and dry place below +8°C or 2 to 4 weeks at room temperature.
- **MAPP:** 18613
- **Usable in Organic Production**

USAGE RECOMMENDATIONS

The most efficient way to use LALSTOP K61 WP is preventatively. The active microorganism survives in the rhizosphere for several weeks protecting the crop against pathogens.

LALSTOP K61 WP is mainly used in the form of an aqueous suspension.

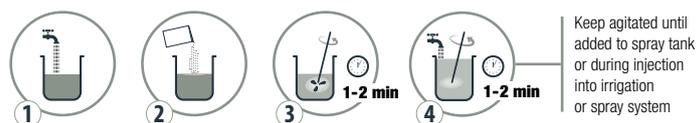
The application rate depends on whether LALSTOP K61 WP application will be made to a growing medium (soil, compost, other substrate) before sowing or repotting of crop plants or alternatively at a timing from sowing, transplanting or repotting of crop plants.

Dose rates for certain cropping situations are not recommended to be lower than the following :

- **200 g/ha** per application in greenhouses and open fields
- **400 g/ha** in lacons, green areas and sport fields

PREPARATION

Premix concentrate preparation



Mixing in spray tank

