

SUBTILEX® L

A Liquid Biological Fungicide
MASTER LABEL

FOR USE AS A SEED TREATMENT, IN-FURROW APPLICATION OR INCORPORATING INTO PEAT MOSS OR GROWING MEDIA

ACTIVE INGREDIENT:

Bacillus subtilis, MBI 600 (not less than 2.2×10^{10} viable spores per ml)... 0.18%
Other ingredients:..... 99.82%
TOTAL: 100%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See Additional Precautionary Statements on Side (Back) Panel

EPA Reg. No. 71840-5 EPA Est. No. ___

U.S. Patent No. 5,061,495
U.S. Patent No. 5,344,647
Canada Patent No. 1,324,099

Another quality biological product from:

Becker Underwood
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www.beckerunderwood.com

Net Contents: _____ Batch Code: _____
SUBTILEX is a Reg. TM of Becker Underwood, Inc.
Bacillus subtilis, MBI 600 strain is a product of Becker Underwood, Inc.

FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Personal Protective Equipment (PPE):

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves and shoes plus socks. As a general precaution when exposed to concentrations of living microbial products such as this, all mixers/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95. Follow manufacturer's instructions for cleaning/maintaining PPE. Keep and wash PPE separately from other laundry.

User Safety Requirements:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE immediately after handling this product. If gloves are worn, wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards:

For Seed Treatment: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment washwater. Do not apply this product while bees are actively visiting the area.

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 agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product 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 for exceptions pertaining to the statements in this labeling about PPE, restricted-entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 0 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, waterproof gloves and shoes plus socks.

SUBTILEX® L contains bacteria, which colonize on the developing root system, suppressing disease organisms such as *Fusarium*, *Rhizoctonia*, and *Alternaria* that attack root systems. When used with a chemical seed treatment, the combination of chemicals and SUBTILEX® L provides protection to the root for a much longer time than with chemicals alone. As the root system develops, the bacteria grow with the roots extending the protection throughout the growing season. As a result of this biological protection, a vigorous root

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Under the Federal Insecticide, Fungicide, and Rodenticide Act, this pesticide is labeled under EPA Reg. No. 71840-5
FEB 23, 2005

system is established by the plant, which often results in more uniform stands and greater yields.

In addition, SUBTILEX® L has been shown to increase the amount of nodulation by nitrogen-fixing bacteria when used on many legumes. This improvement in nodulation is a result of a healthier root system allowing more sites for nodules to form from inoculated or naturally occurring soil borne nitrogen-fixing bacteria.

FOR USE AS A SEED TREATMENT

SUBTILEX® L may be diluted with water and applied directly to dry seed or mixed with liquid *Rhizobium* inoculants and/or other registered seed treatment insecticides and fungicides. Do not store mixtures of SUBTILEX® L and pesticides for longer than 72 hours.

CAUTION: If Rhizobium inoculants are to be used in the tank mix with other treatments (fungicides, insecticides, nematicides, fertilizers and etc.) make sure that they are compatible (not harmful) to the Rhizobium. It is also very important that you use only chlorine free water in the tank mix. If one or more treatments are not compatible (harmful) they should be mixed in and applied from a separate mix tank

COTTON: For suppression of *Rhizoctonia* and *Fusarium* seedling diseases, and *Fusarium* wilt, apply at 0.6-2.4 fl.oz. per 100 lbs (18-72 ml per 45 kg) of delinted cotton seed as a planter box treatment. May be diluted with water to achieve improved application coverage to the seed. Please consult manufacturer for additional information.

SOYBEANS: For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, and for improvement of nodulation by *Bradyrhizobium japonicum*, combine with inoculant products (i.e., Becker Underwood's VAULT). Apply 0.14 fl. oz. (4 mL) of SUBTILEX® L per 100 lbs (45 kg) of

soybeans or in combination with *bradyrhizobium japonicum* inoculant to improve nodule formation. For example, apply 100 mL of SUBTILEX® L plus 3.1 liters of the previously mentioned inoculant products to 2500 lbs of seed.

Please note that the inoculant range may change with unforeseen improvements and concentration changes.

SEED AND POD VEGETABLES: (such as) green beans, snap beans, lima beans, kidney beans, navy beans, pinto beans, wax beans, pole beans, garden peas, peas and field beans: For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, apply 0.6-2.4 fl.oz. per 100 lbs (18-72 ml per 45 kg) of seed. For improvement of nodulation by *Rhizobium* in fields where appropriate strains are detectable, apply at 0.6-1.2 fl.oz. per 100 lbs (18-36 ml per 45 kg) of seed.

ALFALFA, FORAGE AND TURF GRASSES: For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, and for stimulation of germination and plant vigor, apply at a rate of 0.2-12 fl.oz. per 100 lbs (6-354 ml per 45 kg) (large – small seed varieties respectively) of seed as a blend, or mixed with other registered seed treatments or liquid seed coating agents.

WHEAT AND BARLEY: For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, apply 0.1-0.6 fl.oz. per 100 lbs (3-18 ml per 45 kg) of seed.

CORN: (Field and Sweet) For suppression of root disease caused by *Fusarium*, apply 0.6-2.4 fl.oz. per 100 lbs (18-72 ml per 45 kg) of seed.

CANOLA: For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, apply at a rate of 1.6-38 fl.oz per 100 lbs (47-1125 ml per 45 kg) of seed.

FOR USE AS AN IN-FURROW TREATMENT

COTTON, SEED AND POD VEGETABLES, PEANUTS, SOYBEANS AND CORN: Apply SUBTILEX® L concentrate at 0.1–1.2 fl. oz. per acre (3–36 ml per ha.) following the application procedures listed below:

SUBTILEX® L may be applied as a water-based suspension with other in-furrow treatments (including Becker Underwood liquid inoculants, i.e. VAULT Rhizobium inoculant, etc.) via standard application equipment.

CAUTION: If Rhizobium inoculants are to be used in the tank mix with other in-furrow treatments (fungicides, insecticides, nematicides, fertilizers and etc.) make sure that they are compatible (not harmful) to the Rhizobium. It is also very important that you use only chlorine free water in the tank mix. If one or more in-furrow treatments are not compatible (harmful) they should be mixed in and applied from a separate mix tank

To mix, first add the in-furrow treatment(s) and or the Rhizobium liquid inoculant to the mix tank with approximately ½ of the required water. Slowly add the SUBTILEX® L to the slurry until a uniform suspension is obtained. Add the remainder of the water and maintain constant agitation throughout the application. Apply the slurry at 5-20 gallons per acre. Do not store mixed slurries for longer than 72 hours.

FOR INCORPORATION INTO PEAT MOSS OR GROWING MEDIA

SUBTILEX® L may be applied as a water-based slurry with/without other registered seed treatment insecticide, fungicides or fertilizers. Pretest for compatibility with seed treatment products.

APPLICATION RATES: Add SUBTILEX® L to peat moss or soil-based growing media at a rate of

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1.3-13 fl.oz (38-380 ml) per 100 cubic yards of loose growing media.

First mix the required amount of SUBTILEX* L with water [at the equivalent rate of 1.3-13 fl.oz. per 131 gallons (38-380 ml per 35 liters)]. Agitate continuously and then apply evenly with conventional spray equipment to the growing media.

IMPORTANT: Treated peat moss or growing media is only for non-bearing, non-fruiting plant use in protected growing environments (e.g. glasshouse or greenhouse), and is not for use in non-protected environments (e.g. non-contained nurseries or slat houses).

CHEMIGATION

Do not apply this product through any type of irrigation system.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Do not contaminate water by cleaning of equipment or disposal wastes.

STORAGE: Store in a dry place.

PRODUCT DISPOSAL: Wastes resulting from the use of this product may be disposed on site, or at an approved waste disposal facility.

CONTAINER DISPOSAL: Completely empty container, and rinse residue into mixing equipment. Then dispose of container in a sanitary landfill or by incineration if allowed by State and local authorities. Dispose of box in the same manner. Do not reuse container or box.

NOTICE – READ CAREFULLY CONDITIONS OF SALE AND LIMITED WARRANTY STATEMENT

Becker Underwood, Inc. warrants that this product conforms to the specifications on the label and is reasonably fit for the purposes stated on the label when

used in strict accordance with the directions, subject to the inherent risks set forth below. Becker Underwood, Inc. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use: It is impossible to eliminate all risks associated with use of this product. Lack of performance, injury, or other unintended consequences may result because of such factors as use of the product contrary to strict label instructions and established safe practice, abnormal conditions (such as excessive rainfall, drought, and Acts of God), presence of other materials, use in combination with other materials, the manner of application, or other factors, all of which are beyond the control of Becker Underwood, Inc. or the seller. All such risks shall be assumed by the buyer.

Limitation of Remedies: The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Becker Underwood, Inc's election, one of the following: (1) replacement of the amount of product used; or (2) refund of the purchase price paid for the product. Becker Underwood, Inc. shall not be liable for losses or damages resulting from handling, storage, or use of this product unless Becker Underwood, Inc. is promptly notified of such loss or damage in writing. In no case shall Becker Underwood, Inc. be liable for consequential or incidental damages or losses. Becker Underwood, Inc. neither assumes, nor authorizes any person to assume for it, any other liability in connection with the sale, storage, use, or handling of this product other than expressly set forth herein.

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