



ESFC – NATURAL PLANT PROTECTOR

Defender is a biological fungus control for the prevention and control of fungi on turf grass, fruit, vegetables and horticultural and agricultural crops. **Defender** destroys zoospores that cause fungal disease on contact. **Defender** does not require a withholding period and is safe for use on grain, fruit, roots and root crops.

TYPICAL ESFC APPLICATIONS:

FIELD CROPS - Wheat, oats, barley, rye, and grass

ROOT & TUBER VEGETABLES - Beet, potato, radish, sweet potato and yam

FRUITING VEGETABLES - Eggplant, pepper and tomato

CUCURBIT VEGETABLES - Cantaloupe, cucumber, melon, squash, watermelon and zucchini

CITRUS FRUIT - Lemon, grapefruit and orange

MISC FRUIT & VEGETABLES - Avocado, grape, and strawberry

ORNAMENTAL PLANTS - Begonia, chrysanthemum, cyclamen, dahlia, ferns, foliage plants, fuchsia, ivy, lily, miniature roses, orchid, peony, phlox, poinsettia, pyracantha, and rhododendron

ORNAMENTAL TREES & SHRUBS - Azalea, birch, blue spruce, bogainvilla, boxwood, camellia, cedar, cherry, crab apple, cyprus, dogwood, elm, ficus, fir, forsythia, gardenia hackberry, holly, hydrangea, laurel, lilac, magnolia, maple, myrtle, peach, pines, poplar, privet, spruce, sycamore

BEDDING PLANTS - Aster, calendula, carnation, cosmos, impatiens, lobelia, marigold, nasturtium, pansy, petunia, snapdragon, sweet alyssum, verbena, and zinnia

APPLICATION METHODS:

Defender can be foliar, and soil applied with the aid of conventional spray apparatus. For "initial control", apply directly to the soil prior to seeding or at the early stages of plant growth. For "preventative control", apply as required during growth period. Application rates may vary with environmental conditions, soil type, plant density, canopy, management practices, etc.

TYPICAL APPLICATION RATES / ACRE - METRIC	
FIELD CROPS - FOLIAR	450 - 600 ml / Acre - Apply in 20 – 40 L water
FRUIT TREES - FOLIAR	450 - 600 ml / Acre - Apply in 100 – 200 L water
SOIL	600 - 900 ml / Acre - Apply in 40 L water
LAWN CARE	300 ml / 1000 sq. ft. - Apply in 20 – 30 L water
HYDROPONICS	Maintain a concentration of 85 PPM
ROOT DIP	Maintain a concentration of 85 PPM

TYPICAL APPLICATION RATES / ACRE - IMPERIAL	
FIELD CROPS - FOLIAR	15 - 20 oz / Acre - Apply in 5 – 8 gallons of water
FRUIT TREES - FOLIAR	15 - 20 oz / Acre - Apply in 25 – 50 gallons of water
SOIL	20 - 30 oz / Acre - Apply in 10 gallons of water
LAWN CARE	10 oz / 1000 sq. ft. - Apply in 5 – 8 gallons of water
HYDROPONICS	Maintain a concentration of 85 PPM
ROOT DIP	Maintain a concentration of 85 PPM

DEFENDER TANK MIXING INSTRUCTIONS:

Step 1: Fill tank with half the recommended water

Step 2: Add the appropriate amount of **Defender** and agitate

Step 3: Add remaining water and thoroughly agitate

** Continued agitating is **NOT** necessary - Diluted solution should be used within 48 hours

TIPS:

- Early treatment will prevent diseases from developing
- Thorough coverage is necessary for disease control
- To optimize control, apply when the risk of fungal disease is high
- It is preferable to increase the frequency of applications rather than the concentration of solution
- Application interval and rate may vary depending on plant density, soil and environmental conditions and results required.

SAFETY:

Defender is produced in accordance with NOSB (National Organic Standards Board) guidelines. The materials used in the production process are derived from naturally occurring and sustainable sources and are consistent with organic principals and the National List of Allowed Substances. **Defender** does NOT contain synthetic chemicals, animal components, animal by products, manure or manure by-products. **Defender** is environmentally safe and is not harmful to animals, plants and humans.

COMPLIANCE:

Fully complies with EPA Toxic Substance Control Act (TSCA) and the rules, orders and regulations promulgated there under including:

- a) Sections 4, 5, 6 & 7; Title 40 Chapter 1, 707.20 thru 707.75;
- b) 40 CFR Sections 704.3, 710.2(e) and 720.3(c); and
- c) Sections 5 and 13, reference 42FR64583
- d) Does not contain marine pollutants as defined in 49 CFR 171.8.

STORAGE & HANDLING:

Store in a cool location away from direct sunlight - No special handling required

PACKAGING:

2 Litre Jug
 20 Litre (5 gallon) HDPE Pail
 205 Litre (45 gallon) Barrel
 1000 Litre Tote