

Supplemental Label Must Be In Possession During Application



# SNS DC™

## All Natural

# Disease and Fungal Control

# Application & Use Guide

### Ingredients:

Active Ingredients .....	1.50%
Citric Acid.....	1.50%
Other Ingredients.....	98.50%
<i>L-Ascorbic Acid (vitamin C), Sodium Sulfate, Potassium Sorbate, Quillaja Saponaria (Soap Bark) &amp; Purified Water</i>	
Total .....	100.00%

This product has not been registered by the United States Environmental Protection Agency. Sierra Natural Science Inc. represents that this product qualifies for exemption from registration under the Federal Insecticide, Fungicide and Rodenticide Act. (FIFRA)

**Title 25b Pesticide**  
**RE Entry Time (REI) 0**

### What it does:

SNS-DC™ provides a barrier and protective preservative shield for plants to heal and protect them against damaging microbes. The SNS-DC™ barrier is harmless to the plant but distasteful and toxic to molds, mildew, fungus and bacteria. SNS-DC™ Disease and Fungal Control is made up of pure natural materials that are highly water soluble. The natural materials are all FDA food grade and GRAS (generally recognized as safe) materials. SNS-DC™ Disease and Fungal Control is exempt from EPA registration under minimum risk pesticide exemption under FIFRA section 25(b) and has a zero restricted entry interval (REI) = 0.

### How it Works:

SNS-DC™ water soluble formula displaces salts and sequesters metals that the microbes depend on to colonize. The permeability nature of SNS-DC™ causes penetration of the microbial cell wall providing preservatives and inhibitors to work on the Fungus, Bacteria and Molds which are prevented from decomposing the plant cell wall do to the natural preservative action of SNS-DC™. Microbial cell wall dehydration and resulting death of the microbe is caused by the natural dehydration agent and oxidative action of SNS-DC™.

### Advantages:

The first advantage is long term control. A foliar application of a disease control is constantly exposed to the elements. Rainfall, irrigation and sunlight all play a part in the dilution of the disease control. SNS-DC™ penetrates the microbial cell wall and builds a protected coating against the elements thus keeping the active ingredients available longer to use against the microbes.

The second advantage of SNS-DC™ over conventional disease control products is that multiple natural preservatives are used to stop decomposition of the plant cell wall thus adding an active natural healing action to the plant not just a controlling action against microbes.

The third advantage SNS-DC is an all-natural product that requires no interval time to entry, may be used multiple times without causing unwanted problem or toxicities to other animals or wildlife and may reduce food borne pathogens such as E.coli. SNS-DC™ may be applied with other fertilizers, fungicides and other pesticides, but please perform a jar test for compatibility.

### Mixing: Shake Well Before Use

Fill the spray tank to at least half the desired amount with clean water and commence agitation. Add the required quantity of SNS-DC™ Natural Disease and Fungal Control directly to the water and complete filling to the final volume. Continue agitation. Do not make a slurry or paste prior to adding to the tank.

### Application:

#### Directions for Use:

##### Directions for Mixing:

**Potted Plants, Greenhouse:** Mix 1 ounce (2 tbsp. or 28 ml) of SNS-DC™ to one gallon (3.79 L) of water.

**Bedded Plants, Turf & Agriculture Field:** Mix 1.3 ounce (2.6 tbsp. or 38 ml) of SNS-DC™ to one gallon (3.79 L) of water (**64 ounces of SNS-DC™ per 50 gallons of water per acre minimum**). Mix well. Mixed solution may be stored for one week or used immediately. Multiple applications may be necessary due to the severity of disease. SNS-DC may be used as maintenance pre-emergent disease control. Allow to dry, then culture test for disease.

##### Foliar Spray

**Plant Site Use For All Plants & Turf** (Leaves (Foliage), Stems, Stalk, Fruit and around Flowers).

**Coverage Potted Plants** = 1 gallon of mixed solution will cover approximately 550 square feet, No restricted entry interval (REI)=0. Coverage **Bedded & Agriculture Field Plants** = 1 gallon of mixed solution will cover approximately 500 to 900 square feet dependent on sprayer droplet size requirements. Review application guide for specific crop and mixing information. It takes about 1-2 days (1 to 3 days for potted plants) after applying to start working and will continue to work for up to 1 week. Reapply every 5-7 days as needed.

Mixed solution may be stored for up to two weeks or used immediately. For best results use warm (70 degree) Distilled or "Chlorine Free" Water or water with the least amount of salts in it for a better solution of SNS-DC™.

Visit <http://sierranaturalscience.com/ag-products/sns-dc-c/> for more information. No restricted entry interval (REI)=0.

**Spraying/Fogging** = Spray all plant parts (leaves, stems, stalk, crowns & other) Spraying lightly on top of the soil may be helpful in reducing unwanted yeast and molds. Be careful when contacting flowers as excess moisture may have unwanted effects. Always spray in the cooler part of the day or with the grow lights off.

**Chemigation** = Anti-siphon and back flow device must be used. Use in overhead irrigation systems only. A chemical acid rated pump only. Review application chart for proper rate per acre per crop. Use chemical at the end of irrigation cycle in order not to over dilute.

After using the material, thoroughly wash all food contact surfaces contacted by the concentrate with soap and water. Do not use near heat or open flame. Store in cool location out of direct sunlight. Do not freeze. Wash hands thoroughly after handling.

**GENERAL:** Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they should be observed.

Application is designed to be compatible with materials presently applied to various crops, as well as the timing of the applications. Application and mixing should be made using appropriate spray equipment and sufficient water to provide adequate penetration and coverage. Equipment settings and water volume may need to vary, depending on the growth stage of the crop and the crop type.

**GROUND:** Be sure to maintain agitation during mixing and application to assure uniform product suspension. Thorough coverage of all foliage is essential for effective SNS-DC™ Natural Disease and Fungal Control application which can be applied by commonly used ground equipment, hose-end, pressurized, greenhouse and hand-held sprayers. To achieve good coverage, use proper spray pressure, gallon per acre, nozzles, nozzle spacing and ground speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration.

**AERIAL:** This product can be applied by aerial application. Refer to the Aerial Drift Reduction Advisory Information section of this product application guide for general directions and precautions. Use the application rate indicated with sufficient water to achieve thorough coverage, typically 10 to 30 ounces of SNS-DC™ to 20 gallons of water per acre.

#### AERIAL DRIFT REDUCTION ADVISORY INFORMATION

**GENERAL:** Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed.

### Crop Safety:

SNS-DC™ Natural Disease and Fungal Control have been used on a wide range of plant species without damage, up to 4x concentration. However, some species and varieties are particularly sensitive to chemical products. It is advisable to treat only a small number of plants first, in order to determine their reaction to the product, before large scale use. Contact Sierra Natural Science for further information on plant toxicity.

### Compatibility:

This product may be combined in the spray tank with various other plant protection products with limited restriction or high pH products. **Do Not Mix with OILS, Oxidizers or Bicarbonates** Always mix SNS-DC™ Natural Disease and Fungal Control first in the mix tank, followed by the other components. With all mixtures, constantly agitate prior to and during application. **A jar test should always be performed prior to mixing with other chemicals.**

### Ecological Information:

**ENVIRONMENTAL DATA: CAUTION!** Floor and other surfaces may be slippery. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. G., Vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer. **ENVIRONMENTAL TOXICITY:** No information found.

## Storage and Disposal:

Protect container from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids); observe all warnings and precautions listed for the product. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

## Safety Instructions:

May irritate the eyes. Avoid contact with eyes and skin. Avoid inhaling dust or spray mist. Wash hands after use.

## First Aid:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air in all cases call a physician immediately.

## Material Data Safety Sheet:

Additional information is listed in the Material Safety Data Sheet-SDS, which can be obtained from Sierra Natural Science Inc.

## Exclusion of Liability:

This product must be used strictly as directed, and in accordance with all instructions appearing on the label and in other reference material. Sierra Natural Science accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions. Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.

Crop	SNS-DC Foliar Spray Rate/Amount	Gallons per Acre	Frequency	Timing	Pest
Potted Plants Potted Herbs Potted Cannabis Potted Berries Potted Ornamental	1 ounce per gallon	One Gallon of Ready to Use will cover 500 Square Feet	Every 5 to 7 Days	May be used up to day of harvest immediate entry	Powdery Mildew, Downy Mildew, Blight, Rust, Bacterial Leaf, Botrytis
Lettuce Chicory/Endive Artichoke Sunflower Safflower Spinach Swiss Chard Sugar beet Wasabi Eggplant Pepper Potato Tomato Paprika Asparagus	2 to 6 Quarts Per Acre	10 Gallon Foliar Spray Minimum	1 to 4 consecutive times then stop until disease pressure increases then repeat, may be used as a maintenance product	May be used up to day of harvest immediate entry	Powdery Mildew, Downy Mildew, Blight, Rust, Bacterial Leaf Spot
Shallot Garlic Chives Leek Cucumber Honeydew melon Cantaloupe Watermelon Pumpkin Squash Zucchini	2 to 6 Quarts Per Acre	10 Gallon Foliar Spray Minimum	2 to 4 consecutive times then stop until disease pressure increases then repeat, may be used as a maintenance product	May be used up to day of harvest immediate entry	Powdery Mildew, Downy Mildew, Blight, Rust, Black Mold & Botrytis
Alfalfa Lentil Peanut Bean Soybean Clover Lupin Pea Corn Oats Rice Rye Sorghum Barley Wheat Millet Sugarcane	2 to 6 Quarts Per Acre	10 Gallon Foliar Spray Minimum	2 to 4 consecutive times then stop until disease pressure increases then repeat, may be used as a maintenance product	May be used up to day of harvest immediate entry	Powdery Mildew, Downy Mildew, Botrytis, Rust & Black Mold

<b>Crop</b>	<b>SNS-DC Foliar Spray Rate/Amount</b>	<b>Gallons per Acre</b>	<b>Frequency</b>	<b>Timing</b>	<b>Pest</b>
Carrot Celery Fennel Dill Parsley Parsnip Cumin Coriander/Cilantro Caraway	2 to 6 Quarts Per Acre	10 Gallon Foliar Spray Minimum	2 to 4 consecutive times then stop until disease pressure increases then repeat, may be used as a maintenance product	May be used up to day of harvest immediate entry	Powdery Mildew, Downy Mildew, Blight, Rust, Black Rot & Bacterial Leaf Spot
Onion Broccoli Brussel Sprouts Cauliflower Cabbage Collard Greens Horseradish Mustard Kale Kohlrabi Radish Cress Rutabaga Bok choy Chinese Cabbage Watercress Turnip Radicchio	2 to 6 Quarts Per Acre	10 Gallon Foliar Spray Minimum	1 to 4 consecutive times then stop until disease pressure increases then repeat, may be used as a maintenance product	May be used up to day of harvest immediate entry	Downy Mildew, Blight, Rust & Bacterial Leaf Spot
Strawberry Caneberry Blueberry Raspberry Blackberry	2 to 6 Quarts Per Acre	10 Gallon Foliar Spray Minimum	2 to 4 consecutive times then stop until disease pressure increases then repeat, may be used as a maintenance product	May be used up to day of harvest immediate entry	Powdery Mildew, Downy Mildew, Black Mold & Botrytis

## Questions or Comments?

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