



## Frequently Asked Questions

### SuffOil-X®

#### **What is SuffOil-X?**

Spray Oil Emulsion Fungicide, Insecticide and Miticide. It is the ideal choice for effective insect, mite and disease control in a broad range of greenhouse, nursery and vegetable crops.

#### **What pests does SuffOil-X control?**

SuffOil-X has a wide range of activity on most mites, scales, aphids, psyllids, mealybugs, early stage caterpillars, whiteflies, leafminers and other immature or adult soft bodied insects. It is also effective on eggs of mites, aphids and some moths. As a fungicide, SuffOil-X also controls rust and powdery mildew.

#### **What is the mode of action of SuffOil-X?**

The primary mode of action is suffocation. This mode of action requires total spray coverage. As a fungicide, it interferes with the attachment of the pathogen to the host.

#### **Is SuffOil-X systemic?**

No. It is a contact material.

#### **Does SuffOil-X work on soil inhabiting insects?**

No. SuffOil-X is not labeled for drenching.

#### **Is SuffOil-X safe for beneficial insects?**

Yes and no. While SuffOil-X will kill beneficial insects when sprayed directly on them, SuffOil-X leaves no residues and therefore is less disruptive to beneficial insects than traditional materials with long residual activity. SuffOil-X allows beneficials to rapidly repopulate a sprayed area. Releases of beneficials can begin within 24 hours. Some beneficials can avoid sprays due to their mobility.

#### **Is SuffOil-X safe for workers?**

As with any product, care must be taken when handling it. SuffOil-X is labeled as a category III pesticide with the word Caution. SuffOil-X has a 4 hour Restricted Entry Interval (REI) and appropriate Personal Protective Equipment for re-entry during this time period is listed on the label.

#### **Is SuffOil-X safe for plants?**

SuffOil-X has been tested on a broad range of plants and a listing is available on the SuffOil-X landing page. The unique formulation allows for less oil to be applied and faster drying time. The small droplets allow for a more uniform coverage and thinner coating of the leaf surface. Since heavy oils are not used, this lessens the possibility of crop damage without loss of efficacy. Follow oil spray guidelines or application tips to reduce or eliminate the risks of phytotoxicity.

#### **Is SuffOil-X OMRI listed?**

Yes. SuffOil-X was approved for organic use in 2009.



### **Is SuffOil-X supposed to be white in color?**

Yes. This is due to the pre-emulsified formulation. The benefits of the pre-emulsification process are that SuffOil-X dilutes with water easier and more thoroughly. Hard water is not a problem. SuffOil-X will not separate for many hours in a spray tank. It allows for excellent coverage because smaller oil droplets are created.

### **How often should I spray SuffOil-X?**

Apply as needed, but no more often than 7 days. Begin spraying at the first sign of pests.

### **Can you tank mix SuffOil-X?**

Yes. SuffOil-X is compatible with most insecticides and fungicides including BotaniGard®, CEASE®, and Molt-X®. However, do not use in combination with captan, folpet, oxythiquinox (Morestan) or any product containing sulfur. Also do not use with carbaryl (Sevin) or dimethoate (Cygon). Do not use with any product whose label recommends the use of no oils. Do not use in combination with NPK foliar fertilizer applications.

### **What are some tips for applying SuffOil-X?**

Use enough spray solution to completely penetrate the leaf canopy and cover both top and bottom of all leaves until wet without significant runoff. Monitor weather conditions. Apply when oil will dry and evaporate in 1-2 hours and when relative humidity is less than 90%. Spray early in the day and when temperature does not exceed 95°F. Avoid application on overcast, humid days and after rain when evaporation time will be longer. Avoid spraying during high winds. Spray when there is adequate soil moisture and no drought stress. If needed, irrigate crops before applying SuffOil-X.

### **What is the typical rate of application for SuffOil-X?**

Use SuffOil-X at 1-2% v/v (volume to volume) (1-2 gal/100 gal or 4-8 L/400 L of water). The maximum labeled rate is 2%. It is recommended to use the 1% rate for any indoor or greenhouse-grown crops. While there is no restriction on how long the mixed solution can be stored, we recommend using the solution within 24 hours after vigorous agitation.

### **Should SuffOil-X be used through a fogger or other ULV equipment?**

No, for two reasons. First, the concentration cannot exceed 1 – 2% v/v. Secondly, the very small droplet sizes do not provide the necessary wetting of the insect and mite pests.

### **Does the SuffOil-X rate require adjustment when using lower water volumes?**

No. It must be mixed at either the 1% or 2% v/v rate regardless of water volume. Higher concentrations than this will result in foliar phytotoxicity.

### **How is SuffOil-X packaged?**

SuffOil-X is packaged in 2.5-gallon plastic jugs. A case contains 2 x 2.5 gallons. SuffOil-X can also be purchased in 30-gallon drums.

### **Where do I purchase SuffOil-X?**

BioWorks has selected distribution partners in virtually all areas of the US. Visit our website ([www.bioworksinc.com](http://www.bioworksinc.com)), or call 800-877-9443 to locate the closest supplier in your area.

Refer to product labels for complete application details. Additional technical information is available on our website ([bioworksinc.com](http://bioworksinc.com)) or from your BioWorks technical sales manager. SuffOil-X® is a registered trademark of BioWorks, Inc. Always read and follow label directions.