



Surround® CF

Crop Protectant

SPECIMEN LABEL

Surround CF Crop Protectant forms a barrier film, which acts as a broad spectrum agricultural crop protectant for controlling damage from various insect pests. Surround CF is specially designed for rapid mixing in cold water

ACTIVE INGREDIENT:

Kaolin 95.0%

OTHER INGREDIENTS: 5.0%

TOTAL: 100.0%

NOT A PLANT FOOD INGREDIENT

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID

If in eyes:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-877-1737 for emergency medical treatment information.

The use of **Surround® CF** in agricultural crop protection applications is covered by US Patents 6,027,740; 6,069,112; 6,110,869 and 6,156,327.

EPA Reg. No. 61842-16

EPA Est. No. 51036-GA-001

Manufactured for:
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NSV1SPUS0508



PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long sleeved shirt
- Long pants
- Socks and shoes
- Dust/mist-filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Nuisance dust masks and goggles provide the best protection for harvesters especially when plants are shaken during harvest.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment wash water.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

AGRICULTURAL USE REQUIREMENTS

<p>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. Use this product only 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, in forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.</p> <p>The restricted-entry interval (RED is 4 hours from the time of application. Do not allow worker entry into treated areas during the restricted-entry interval (REI). Personal protection equipment required for early entry workers are long-sleeved shirts, long pants, and shoes plus socks.</p>

DO NOT apply **Surround CF** through any type of irrigation system.

Surround CF should be used only in accordance with recommendations on this label or in separately published Tessenderlo Kerley, Inc. supplemental labeling recommendations.

I. GENERAL INFORMATION

Surround CF protectant forms a mineral-based particle film intended for protection of agricultural crops. When **Surround CF** is applied to plants, a dry white film results.

Surround CF is specially designed for rapid mixing into cold water (less than 40° F). Pests may be listed as suppressed, which means that full control may not be achieved, and supplemental methods may be needed to enhance the level of control. **Thorough, uniform, and consistent coverage is essential throughout the infestation or stress period.**

- **Pre-harvest intervals (PHI): Surround CF** applications on pears are only allowed until fruit set. **DO NOT** use the **Surround CF** formulation after fruit set. Other **Surround** formulation(s) are designed for uses after fruit set.

A. MIX INSTRUCTIONS:

For Agitating Sprayer Tanks

1. Slowly add **Surround CF** powder into the water in a recirculating sprayer tank, making sure to keep agitation brisk. It is not recommended to add **Surround CF** to a sprayer tank that does not have adequate agitation. Add directly into the mix basket if pump recirculation empties into the mix basket. If there is no mix basket, add **Surround CF** very slowly to the recirculating water. Avoid dumping **Surround CF** directly into pump intake area as this could plug the filter or intake. Mix thoroughly.
2. Add tank mix pesticides, such as oils, if any.
3. Continue agitation until all of the material is sprayed from the tank.
4. At the end of the application, spray until empty and flush system and nozzles with fresh water. Periodically check in-line strainer and clean if necessary. Properly dispose of rinse water.

For Non-agitating Sprayer Tanks, Such as Handheld and Backpack Sprayers

The following mixing sequence must be followed:

1. Use **Surround CF** powder at a rate of ¼ to ½ lb of **Surround CF** powder per one gallon of water. One-half pound is approximately 3 cups. For sprayers difficult to shake, premix in a 5 gallon bucket, stir, and pour suspension into sprayer.
2. While stirring or swirling, slowly add **Surround CF** powder into ¼ to ½ of the water that will be used in the batch.
3. Mix thoroughly by shaking the closed container vigorously for 30 seconds.
4. Add tank mix pesticides, such as oils, if any.
5. Add the remainder of the batch water and shake for an additional 30 seconds.
6. Shake the sprayer occasionally during application.
7. At the end of the application, spray until empty and flush system and nozzles or, blow air pressure out of the line and nozzle then store in a cool place. Apply the leftover mix within two weeks to avoid spoilage. Rinse the sprayer before next batch.

B. COMPATIBILITY:

Surround CF is not generally affected by most other insecticides, miticides (including agricultural oils), and fungicides. However, the user should test tank mixes before use. When mixing with other products, make up a small batch and observe slurry and film characteristics. Curdling, precipitation, lack of film formation, or changes in viscosity are signs of incompatibility. **Add tank mix pesticides after the Surround CF powder has been added.** Use of anti-foaming agents is not recommended.

Combinations should be kept agitated and should be applied immediately. **DO NOT** allow combinations to sit for prolonged periods in the chemical supply tank.

Read and follow the applicable restrictions and limitations and Directions For Use on all products involved in the tank mix. The most restrictive labeling applies to the tank mix.

It is not recommended to tank mix with other white mineral particulate products like diatomaceous earth or other sunburn materials. Applications of **Surround CF** over such products or oversprays of such products over **Surround CF** are not recommended as efficacy may be impaired.

The use of additional spreader/stickers not approved by Tessengerlo Kerley, Inc. are not recommended.

Products that specify other spreader/stickers may not be tank-mixable with **Surround CF** if jar tests prior to application show curdling or resulting spray coverage shows excessive beading or poor film formation.

C. GENERAL APPLICATION INSTRUCTIONS

Rates: Rate is dependent on the amount of foliage or branches that need to be covered.

Concentration (the amount of Surround CF per 100 gallons of water): **Surround CF** is recommended to be used at concentrations of 25 to 50 lbs **Surround CF** per 100 gallons, but concentrations of up to 100 lbs per 100 gallons are allowed for specific uses.

Coverage: Use sufficient spray volume to obtain thorough **near drip** coverage. Two or more applications are desirable for complete coverage. For optimal performance as an insecticide, applications must coat all portions of plant that are to be protected, including both sides of the leaves. Another spray is recommended if coverage is insufficient. Dwarf, semi-dwarf, and otherwise well-pruned trees will be easier to cover than large trees. Optimum efficacy may be more difficult to achieve in large trees due to increased difficulty achieving thorough coverage.

Applications to tree crops can be made with commercial air blast or high-pressure sprayers that provide enough air turbulence to coat both sides of the leaves, bark, and fruit. Tractor speed of less than 3 mph is recommended when using airblast sprayers.

Plant Color Change: Plant surfaces will typically turn a hazy white color after drying. Additional treatments will turn the plant surfaces a deeper white. This is normal, and indicates appropriate film formation.

Foliage Dryness: It is not recommended to apply to dripping wet foliage.

Spray Methods: Air blast, high-pressure hand gun, or boom sprayers are recommended for agricultural uses. **DO NOT** apply **Surround CF** through sprinkler irrigation systems. Observe specific crop label instructions for directions regarding spray volume. Calibrate spray equipment per equipment manufacturer to deliver the required volume. At recommended concentrations, the flow rate of suspended **Surround CF** is similar to water. It is recommended to use strainers, preferably no finer than 40 mesh, in the spray system and behind each nozzle per normal practice.

When the dry foliage has lost its white appearance, reapplication is necessary. Heavy rainfall, new growth, and wind erosion will affect film quality. Reapply to re-establish coverage after heavy rain as soon as the foliage is dry. However, reapplication may not be necessary if all target surfaces remain thoroughly coated. Excessively thick coatings are not recommended.

Aerial Application: Aerial applications may not be effective for controlling insects. It is recommended when using aerial applications to take all precautions needed to minimize or eliminate drift, e.g., **DO NOT** spray under windy or gusty conditions. It is recommended to make applications not more than ten feet above the top of the largest plant unless a greater height is required for aircraft safety. It is best when making applications at low relative humidity to increase droplet size to compensate for evaporation. It is not recommended to use spray drift agents not approved by Tessengerlo Kerley, Inc..

Non-Target Surfaces: It is not recommended to spray where the resulting visible white film will be undesirable or cannot be washed off, such as porous wood, masonry, asphalt, and other valuable goods.

Pears

- Surround CF is specially designed for rapid mixing into cold mix water (less than 40° F) that is common in early spring conditions.
- Do not use the Surround CF formulation after fruit set. Other Surround formulation(s) are designed for post fruit set uses.
- Surround CF is designed to be used with nonphytotoxic superior-type agricultural spray oils for best film formation.
- For pre-bloom sprays it is recommended to add at least 0.5 to 1.5 gallons of dormant or summer spray oils per 50 lbs of Surround CF. The preferred addition amount for optimum film formation-only is 0.75 gallons of oil per 50 lbs of Surround CF.
- Oils, especially above 2 gallons per 50 lbs, will reduce the visual whiteness of the particle film. Whiteness may re-appear over time as the oils evaporate or absorb into bark.
- See mix instructions for order of addition.
- Follow all oil label recommendations.

PEST	LBS/ACRE	RECOMMENDATIONS
Pear psylla	50 ¹	<ul style="list-style-type: none"> • On mature pear trees 100-200 gal/acre is recommended. • Prebloom: Apply 3 applications, applying every 7-10 days starting at delayed dormant, but no later than green cluster bud. • Spring populations can be reduced with a fall or winter application of other Surround products.
Over-wintering leafrollers*, especially obliquebanded leafroller (OBLR)	25-50	Apply 2 sprays 7 days apart starting just prior to green tip or at initial emergence of leafroller larvae.
¹ Rates of 100 lbs in 100 to 200 gallons allowed during pre-bloom for high infestation. * Suppression only. Supplemental controls may be needed for complete control.		

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Store in a dry, sheltered location {away from food or feed}. Product is slippery when wet. In case of spill or leak, avoid breathing dust, clean up and dispose of wastes in compliance with applicable Federal, State, and local regulations.

PESTICIDE DISPOSAL: Pesticide, spray mixture or rinsate that cannot be used according to label instructions must be disposed of according to applicable Federal, State, and local procedures.

CONTAINER DISPOSAL: Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of the smoke.

Conditions of Sale and Warranty

CONDITIONS OF SALE – LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

The directions on this label are believed to be reliable and must be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions, the failure to follow the label directions, or good application practices, all of which are beyond the control of Tessenderlo Kerley, Inc., or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. Tessenderlo Kerley, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use, subject to the factors noted above which are beyond the control of Tessenderlo Kerley, Inc. Except as warranted by this label, Tessenderlo Kerley, Inc. makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose. To the extent consistent with applicable law, the exclusive remedy against Tessenderlo Kerley, Inc. for any cause of action relating to the handling or use of this product is a claim of damage, and in no event shall damages or any other recovery of any kind against Tessenderlo Kerley, Inc. exceed the price of the product which causes the alleged loss, damage, injury, or other claim. To the extent consistent with applicable law, Tessenderlo Kerley, Inc. shall not be liable and any and all claims against Tessenderlo Kerley, Inc. are waived, for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income, whether or not based on the negligence of Tessenderlo Kerley, Inc. breach of warranty, strict liability in tort, or any other cause of action. Tessenderlo Kerley, Inc. and the seller offer this product, and the buyer and users accept it, subject to the foregoing conditions of sale and limitations of warranty, liability and remedies.

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