



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

June 9, 2015

P. Leanne Pruett  
Agent  
Tessengerlo Kerley, Inc.  
c/o Pyxis Regulatory Consulting, Inc.  
4110 136<sup>th</sup> St., NW,  
Gig Harbor, WA 98332

Subject: Label Amendment – Adding new (me- too) use on citrus  
Product Name: Sulforix  
EPA Registration Number: 61842-31  
Application Date: February 5, 2015  
Decision Number: 500124

Dear Ms. Pruett:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.


A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, please contact Tamue L. Gibson by phone at (703) 305-9096, or via email at [gibson.tamue@epa.gov](mailto:gibson.tamue@epa.gov).



Shaja B. Joyner, Product Manager 20  
Fungicide-Herbicide Branch  
Registration Division 7505P

Enclosure

**ACCEPTED**  
 Jun 09, 2015  
 Under the Federal Insecticide, Fungicide  
 and Rodenticide Act as amended, for the  
 pesticide registered under  
 EPA Reg. No. 61842-31



**Tessenderlo**  
**KERLEY, Inc.**

**Not for residential use or application to residential sites.** This product may not be used in, on, or around any structure, vehicle, article, surface or area associated with the household, including non-agricultural outbuildings, non-commercial greenhouses, pleasure boats, and recreational vehicles; in or around any preschool or day care facility or on humans or pets.

**SULFORIX®**  
**(FUNGICIDE-INSECTICIDE-MITICIDE)**

**ACTIVE INGREDIENTS:**

Calcium Polysulfide .....  
 OTHER Ingredients .....  
 TOTAL .....

**BY WEIGHT**

27.5%  
 72.5%  
 100.0%

**DENSITY:**

Baume at 60 °F ..... 29.9 °  
 Lbs. per Gallon at 68 °F ..... 10.5

Contains Calcium and Sulfur expressed as Gypsum – 2.8 lbs. per gallon. Total Sulfur – 2.29 lbs. per gallon. Other combined Sulfur – 1.8 lbs. per gallon.

EPA Reg. No.61842-31

EPA Est. No.

SULFORIX – Reg. TM of Tessenderlo kerley, Inc. For Calcium Polysulfide (fungicide-insecticide-miticide).

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER - PELIGRO**

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

<b>FIRST AID</b>	
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eyes open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER:</b>	<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment.          You may also contact 1-866-374-1975 for emergency medical treatment information.</p>
<b>NOTE TO PHYSICIAN</b>	<p>Probable mucosal damage may contraindicate gastric lavage.</p>

NET CONTENTS: \_\_\_\_\_ GALLONS

**Manufactured by:**

Tessengerlo Kerley, Inc.  
2255 North 44th Street, Suite 300  
Phoenix, AZ 85008-3279  
1-888-732-8246

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER**

Fatal if swallowed. Fatal if absorbed through the skin. Fatal if inhaled. Corrosive. Causes irreversible eye damage. Causes skin burns. Do not get in eyes, on skin or on clothing. Do not breathe vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. This product is corrosive to flesh because of its caustic alkaline nature.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on any EPA chemical-resistance category selection chart.

**Mixers, loaders, applicators and other handlers must wear:**

Coveralls over long-sleeved shirt and long pants,

Chemical resistant gloves,

Chemical resistant footwear plus socks,

Goggles or face shield,

Chemical resistant headgear for overhead exposure,

Chemical resistant apron when mixing, loading or cleaning equipment or spills,

A NIOSH approved respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter.

For exposures in enclosed areas a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) must be used.

For exposures outdoors, a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) must be used.

Discard clothing and other absorbent material that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

If farm workers are unable to read, they must be given oral warnings and it must be assured that they understand label precautions and first-aid treatments. Warnings must be given in appropriate language if workers do not understand English. Oral warnings should be given to inform workers of areas or fields which should not be entered without protective clothing, the amount of time the area or field should be vacated and the first-aid actions to take in case of accidental exposure.

### USER SAFETY RECOMMENDATIONS

Users should: Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove clothing/ PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Drift may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply directly to water, 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 washwater or rinsate.

### PHYSICAL OR CHEMICAL HAZARDS

Do not mix SULFORIX with acids or phosphate fertilizer products. Deadly and potentially extremely flammable hydrogen sulfide gas may be emitted.

### 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 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, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

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 over long-sleeved shirt and long pants, chemical resistant gloves, chemical resistant footwear plus socks, goggles or face shield, chemical resistant headgear for overhead exposure and a chemical-resistant apron when mixing, loading or cleaning equipment or spills.

**Double Notification:** Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

SULFORIX is a balanced fungicide-insecticide-miticide. For best results, spray to cover all exposed plant parts and repeat as necessary.

**Not for residential use or application to residential sites.** This product may not be used in, on, or around any structure, vehicle, article, surface or area associated with the household, including non-agricultural outbuildings, non-commercial greenhouses, pleasure boats, and recreational vehicles; in or around any preschool or day care facility or on humans or pets.

**Important Note:** SULFORIX is a contact fungicide. Thorough coverage is necessary.

Do not use on apricots as they are susceptible to sulfur injury. SULFORIX may burn foliage when temperature is high (85°F). Do not make applications at such times. When applied to crops with foliage, let 30 days elapse between treatments with SULFORIX and treatments with an oil spray. Do not combine SULFORIX with other pesticides unless previous experience has shown them to be compatible. If tank mixing, always follow the more restrictive label directions. This product cannot be

mixed with any product containing a label prohibition against such mixing. Do not apply under conditions involving possible drift to food, forage or other planting that might be damaged or the crops thereof rendered unfit for sale, use, or consumption.

**Aerial applications** of SULFORIX is prohibited.

If crust occurs on surface of SULFORIX, break through. Crystallization does not impair product quality.

Do not apply, or allow to drift, to painted surfaces as a permanent stain may result.

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

Do not apply more than 30 gallons of this product/acre/year to any crop listed on this label.

## **SPRAY DRIFT MANAGEMENT**

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product.

For groundboom applications:

**WIND SPEED:**

Do not apply at wind speeds greater than 10 mph at the application site.

**DROPLET SIZE:**

Apply as a medium or coarser spray according to the American Society of Agricultural Engineers (ASAE) 572 definition for standard nozzles (Medium and Coarse) and the minimum volume mean diameter (VMD) for spinning atomizer nozzles.

**RELEASE HEIGHT:**

Apply using a nozzle height of no more than 4 feet above the ground or crop canopy

**For airblast applications:**

Sprays must be directed into the crop canopy, rather than above the canopy.

Outward pointing nozzles should be turned off at row ends and when spraying outer rows.

**TEMPERATURE INVERSION:**

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

## **READ ENTIRE LABEL AND USE STRICTLY IN ACCORDANCE WITH LABEL DIRECTIONS.**

**APPLES AND PEARS:** Scab and Mildew control – Use 2 quarts of SULFORIX in 100 gallons of water. Apply in Prepink, Pink and Calyx periods.

Powdery Mildew – Continued spraying is required during growing season.

Do not use SULFORIX on d’Anjou pears after the Calyx period.

**BLUEBERRIES:** (NOT REGISTERED FOR USE IN CALIFORNIA) Blueberry Bud Mite – DORMANT TO PREBLOOM – Apply 1 gallon of SULFORIX per acre in sufficient water to achieve thorough coverage and penetration of the buds.

POST HARVEST – Apply 1 gallon of SULFORIX per acre in a minimum of 100 gallons of water to achieve thorough coverage and penetration of the buds. Apply SULFORIX immediately after harvest before buds are fully formed so the product can reach the mites under the bud scales. A second application before buds are fully formed may be required to achieve control in highly infested sites.

Phomopsis Cane and Twig Blight, Mummy Berry (caused by fungus *Monilinia vaccinii-corymbosi*), apply a POST HARVEST (September or October) or EARLY DORMANT spray of 1 to 2 gallons of SULFORIX per 100 to 150 gallons of diluted spray per acre. Do not apply more than four times per season. Do not make multiple applications within 10 days of each other.

**NOTE TO USER:** Do not use within 14 days of an oil spray or when temperatures are above 85°F. Burning of foliage may occur during periods of warm temperatures.

**CANEBERRIES:** (Blackberries, Boysenberries, Raspberries, and other Caneberries) **POST HARVEST TREATMENT** – Blackberry Mite – Use 3 gallons per 100 gallons of water. Apply after old canes are removed. Spray again in early spring. **EARLY SPRING (DELAYED DORMANT) TREATMENT** – Red Berry Mite, Leaf Spot, Cane Blight, Blackberry Mite, Anthracnose, Yellow Rust – Use 3 gallons of SULFORIX per 100 gallons of water. Apply as a delayed dormant spray.

**NOTE:** Spray again in Fall as leaves turn color.

**SECOND SPRAY** – Use 2 quarts of SULFORIX per 100 gallons of water. Apply when fruiting arms are about 1 foot long, before blossoms have opened.

**CHERRIES:** Brown Rot, Leaf Spot, Powdery Mildew – 2 quarts of SULFORIX per 100 gallons water when disease appears, or use ½ pint of SULFORIX with 4 pounds wettable sulfur. **DO NOT USE ON FRESH MARKET CHERRIES WHEN FRUIT IS PRESENT.**

**CITRUS:** (NOT REGISTERED FOR USE IN CALIFORNIA)

**Rust Mite:** Apply 2 to 4 quarts of SULFORIX in sufficient water for good coverage as needed. The higher rate of SULFORIX should be applied during heavier pressure conditions.

**GRAPES:** Powdery Mildew, Phomopsis Cane and Twig Borer – During the **DORMANT /DELAYED DORMANT** period **PRIOR** to **BUD SWELL** apply a single application at 1 to 2 gallons of SULFORIX per acre in sufficient water for thorough coverage. During the **GROWING SEASON** – Apply 1 pint SULFORIX or 1 pint SULFORIX plus 4 pounds wettable sulfur in 100 gallons water. Begin applications when early shoot growth occurs and reapply as new shoots appear as new growth will not be protected.

**HAZELNUTS:** (Not For Use in California) Big Bud Mite – Apply 3 gallons of SULFORIX per acre in a minimum of 100 gallons of water per acre for complete coverage of trees. Apply when buds begin to open in the spring.

**PEARS:** **POST HARVEST AND LATE FALL TREATMENTS** – Pear Bud Mites, Blister Mites – Immediately after harvest: Apply 2½ gallons SULFORIX per acre in a minimum of 100 gallons of water for a thorough coverage application on average size trees.

**FALL SPRAY** (September – October, just prior to Leaf Fall) – Apply 2½ gallons SULFORIX in a minimum of 100 gallons of water per acre. Use sufficient spray for a thorough coverage application.

**DELAYED DORMANT SEASON TREATMENT** – Pear Leaf Blister Mites, Pear Psylla, Scale Insects, Aphid and Mite Eggs – Apply 2½ gallons of SULFORIX per acre combined with 3 to 5 gallons Dormant Emulsion or 1½ to 2 gallons Superior or Supreme type spray oil in each 100 gallons water. Use sufficient spray for a thorough coverage application.

**RED CLOVER AND ALFALFA:** Powdery Mildew – 1 gallon of SULFORIX in 50 to 100 gallons water per acre at bud stage.

**ROSES (Nursery Stock and Field Grown Ornamentals):** Powdery Mildew, Rust, Black Spot, Red Spider Mites – Use 1½ pints of SULFORIX per 100 gallons of water on tender new growth and 1½ quarts of SULFORIX in 100 gallons of water if mildew becomes severe. Pick open flowers before spraying to avoid discoloration.

**STONE FRUIT (PEACHES, NECTARINES, PRUNES AND PLUMS):** Brown Rot, Leaf Spot – Use 2 quarts of SULFORIX per 100 gallons water. Apply 3 to 5 weeks before harvest, repeating at weekly intervals until just before picking. Powdery Mildew – 2 quarts of SULFORIX per 100 gallons water, when disease appears, or use ½ pint of SULFORIX with 4 pounds wettable sulfur. Do not use on apricots.

**PEACHES:** Powdery Mildew – Use 1 pint SULFORIX plus 5 to 10 pounds wettable sulfur per 100 gallons of water as a dilute application or 2 to 4 pints of SULFORIX plus 15 to 32 pounds wettable sulfur per acre in 20 to 120 gallons per acre as a concentrate application.

**Leaf Curl** – Apply after all leaves have fallen and before buds begin to swell. If Leaf Curl has been severe, two applications may be needed, the first in Early Dormant and the second in Delayed Dormant. Apply 4 gallons of SULFORIX per acre in a full coverage spray.

**Rust** – Apply 2 quarts of SULFORIX per 100 gallons of water. Begin applications 2 weeks after petal fall and continue making applications at approximate two week intervals throughout the season.

**PRUNES:** Rust – Apply 2 quarts of SULFORIX per 100 gallons of water. Begin applications at full leaf expansion and continue making applications at approximate two week intervals throughout the season.

**PERENNIAL RYEGRASS:** Rust (*Puccinia* Spp.) Rates and Timings: For suppression of rusts (*Puccinia* Spp.) apply 2 quarts of SULFORIX per acre per application by ground equipment only using at least 20 gallons of water per acre just before or as first rust pustules appear. Sequential treatments or other fungicides may be needed as more rust pustules develop. SULFORIX, alone, will not provide season-long rust control.

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Keep pesticide in original container. Store product in a secure locked place, inaccessible to children, pets and livestock. Do not put concentrate or dilute into food or drink containers. Keep container in the shade. For help with any spill, leak, fire, or exposure involving this material call day or night CHEMTREC (800) 424-9300.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your state Pesticide or Environmental Control Agency or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

#### CONTAINER HANDLING:

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of container in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of container in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Refillable Container:** Refillable container. Refill this container with Calcium Polysulfide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For final disposal, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. For final disposal, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

### WARRANTY AND LIMITATION OF DAMAGES

Tessenderlo Kerly, Inc. warrants only that this product conforms to the product description on the label. Except as warranted by this label, Tessenderlo Kerly, Inc. makes no representation or warranty or guarantee, whether expressed or implied, of fitness for a particular purpose of merchantability, or of product performance. Tessenderlo Kerly, Inc. does not authorize any agent or representative to make any such representation, warranty or guarantee. To the extent consistent with applicable law, Tessenderly Kerly, Inc's maximum liability for breach of its warranty or use of this product, regardless of the form of action, shall be limited to the purchase price of this product. To the extent consistent with applicable law, buyer and user acknowledge and assume all risks and disposal liability resulting from handling, storage, use and disposal of this product. If buyer does not agree with or accept these warranty and liability limitations, buyer may return the unopened container to the place of purchase for full refund. Buyer's use of this product shall constitute conclusive evidence of the buyer's acknowledgement and acceptance of the forgoing limitations. Some states do not allow the exclusion of implied warranties or the limitation of certain damages, so the above may not apply. The purchase, delivery, acceptance and use of this product by the buyer are subject to eh terms and conditions of the seller's sales invoice for this product.

[EPA approval date]