

PM 14

42697-1

1 of 9

301/17 S-392397

APR 11 1991

Safer, Inc.  
189 Wells Avenue  
Newton, MA 02159

Gentlemen:

Subject: Safer Insecticidal Soap Concentrate  
EPA Registration No. 42697-1  
Your Letter Dated February 28, 1990

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the revised labeling:
  - Revise your Physical or Chemical Hazards statement to read:  
  
Flammable. Keep away from heat and open flame.
2. Submit five (5) copies of your final printed labeling before you release the product for shipment.

**BEST AVAILABLE COPY**

64962:I:Crowell:L16-13:KEVRIC:3/29/91:4/27/91:EK:WO:CL

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely yours,



Marilyn A. Nauts  
Acting Product Manager (16)  
Insecticide-Rodenticide Branch  
Registration Division (H7505C)

Enclosure

**BEST AVAILABLE COPY**

309

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

4-11-91

DRAFT LABEL - FRONT PANEL

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
is amended, for the pesticide  
registered under EPA Reg. No.

SAFER<sup>R</sup>

42697-1

INSECTICIDAL SOAP CONCENTRATE

FOR USE ON  
FRUITS, NUTS, VEGETABLES AND ORNAMENTALS

ACTIVE INGREDIENTS	BY WT.
Potassium salts of fatty acids	49.0%
INERT INGREDIENTS	51.0%
TOTAL	100.0%

Keep Out of Reach of Children

CAUTION

See Back Panel for Additional Precautionary Statements

NET CONTENTS 1 Gallon

(Also 2.5, 5, 30 and 55 Gallons and bulk)

BEST AVAILABLE COPY

**DRAFT LABEL - BACK PANEL (#1 of 6)**

**Safer<sup>R</sup> Insecticidal Soap** is an effective contact insecticide, that is ideal for use in areas such as parks, restaurants, hospitals, school grounds, malls and other public places, as well as in agricultural, horticultural and greenhouse applications.

**Safer<sup>R</sup> Insecticidal Soap** effectively controls:

Adelgids	Mealybugs	Spider Mites
Aphids	Plant Bugs	Tent Caterpillars
Earwigs	Psyllids	Thrips
Grasshoppers	Sawfly Larvae	Whitefly
Lace Bugs	Scales	Woolly Aphids
Leafhoppers		

**Safer<sup>R</sup> Insecticidal Soap** offers effective insect control on a wide variety of cultivars in ornamental, horticultural and agricultural settings.

Foliage Plants	Trees & Shrubs	Tree Nuts
Flowers	Fruits	Vegetables

**Safer<sup>R</sup> Insecticidal Soap:**

- \* Can be applied up to time of harvest
- \* Can be used as an effective component of integrated pest management programs.

**PRECAUTIONARY STATEMENTS**

**Hazards to humans and domestic animals:**

**CAUTION:** Harmful if swallowed. Avoid contamination of feed and food stuff. May cause eye irritation; avoid eye contact.

**First Aid:** In case of eye contact, flush with plenty of water. Get medical attention if irritation persists.

**Environmental Hazards:** Keep out of lakes, streams and ponds.

**Physical or Chemical Hazards:** Do not use or store near heat or open flame.

**Reentry Protection:** No reentry interval is required.

**STORAGE AND DISPOSAL**

Do not contaminate water, feed or foodstuff by storage or disposal.

**STORAGE:** Store only in original container; in a dry place; inaccessible to children and pets. Do not store full or partial containers in direct sunlight.

**Keep container tightly sealed when not in use.**

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Do not reuse empty container. Triple rinse, then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill or by incineration, if allowed by state and local authorities. If burned, stay out of smoke.

For containers one gallon or less: Do not reuse empty container. Rinse thoroughly before discarding in trash.

DRAFT BACK PANEL (#2 of 6)

**WARRANTY**

Safer, Inc. warrants that the product is free of defects in material and that its content and total net weight are as stated within lawful limits. Safer, Inc.'s sole obligation under this warranty shall be to replace any defective product or refund the purchase price thereof. THIS WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN WITH RESPECT TO THE PRODUCT AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SAFER, INC. IS NOT RESPONSIBLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES. No modification of this warranty may be made except in writing by an authorized officer of Safer, Inc.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For best results use freshly mixed solution. Use soft water whenever possible. If water has a high mineral content and produces soap scale, pretreat water with an approved softening agent or a pesticide compatibility agent before adding concentrate. To prevent or minimize foaming, avoid use of mechanical agitation, place filling hose below surface of spray solution, terminate by-pass and return lines at bottom of tank; if needed use approved antifoam or defoaming agent. CAUTION: Do not use on new transplants, newly rooted cuttings or plants stressed by drought. Avoid application when leaf temperature exceeds 90 F.

**WHEN USED ALONE**

Safer<sup>R</sup> Insecticide Soap may be used up to and including day of harvest, and is useful as a component of Integrated Pest Management (IPM) programs.

Dilute at the rate of 2 gallons of concentrate to 100 gallons of water, except as noted in individual sections. Apply according to the rates and other directions given under the individual crop groupings. Spray should be applied to thoroughly wet all infested surfaces.

**WHEN COMBINED WITH OTHER PESTICIDES**

Safer<sup>R</sup> Insecticidal Soap may be combined with other pesticides to broaden the target spectrum, improve the level of kill and enhance coverage. Such use should conform to accepted use precautions and directions for use of both products. Insecticide Concentrate may be tank mixed by adding 1 gallon of concentrate per 100 gallons of spray containing the label amount of the companion pesticide or less, except where prohibited by local regulations. Products with which it may be tank mixed include, but are not limited to, Bacillus thuringiensis, pyrethrum, and a variety of petrochemical-based pesticides.

## DRAFT BACK PANEL (#3 of 6)

**INDOOR PLANTS:** Mix one part concentrate with 50 parts water, or 2.5 fl. oz. per gallon. Apply when insects or signs of their damage appear. Take care to thoroughly wet all surfaces of infested foliage and branches. For aphids examine plants after two days and spray again if needed. For other pests spray at 7 to 10 day intervals as needed up to three times. Do not make repeated sprays at short intervals without thoroughly rinsing foliage. For Blossom thrips on African violets spray to contact thrips on the blooms. Root mealybug and springtail infestations can be reduced using a soil drench of one to two tablespoons of concentrate in a quart of tepid water applied monthly.

**NOTE:** Do not use on Crown of Thorns and test other euphorbias for phytotoxicity before full-scale application. Do not use on, dracaena, delicate ferns, dieffenbachia, ornamental ivies, palms or succulents without testing.

**FLOWERS AND BEDDING PLANTS GROWING OUTDOORS AND IN GREENHOUSES**, including (but not limited to) foliage plants, roses and succulents. Mix two gallons of concentrate per 100 gallons of water or 2.5 fl. oz. per gallon. Apply when insects appear. Take care to thoroughly wet all infested surfaces. A second application should be timed to control newly hatched young. Repeat weekly as needed up to three times. For earwigs spray directly on insects after disturbing their hiding place.

**NOTE:** Do not use on bleeding heart, jade plant, lantana, lillies or sweetpeas. Some varieties of azaleas, begonias, camellias, fuchsias, gardenias and impatiens have shown sensitivity. If wilting occurs within a few hours rinse with clean water spray. Do not apply to poinsettias after bract coloration begins. Test on chrysanthemums for varietal sensitivity and do not apply to open blooms.

Safer<sup>®</sup> Insecticidal Soap Concentrate mixed 2 gallons per 100 gallons of water may be used as a soil drench to control listed pests in the growing medium of container grown plants.

**ORNAMENTAL LANDSCAPE TREES AND SHRUBS** including (but not limited to) Christmas trees and ornamental plantings in parks, gardens and along rights-of-way. Mix two gallons of concentrate per 100 gallons water or 2.5 fl. oz. per gallon. To control the crawler stage of adelgids, psyllids and scales spray to wet bark surface when infestation warrants. For mites and other listed pests, be sure to wet underside of leaves and needle sheaths.

For tent caterpillars, mix 1 gallon of concentrate to 30 gallons of water or 4 fl. oz. per gallon and spray directly on young larvae when congregated on outside of tent.

To control Balsam Woolly Aphid on true firs (Abies spp.) mix one gallon of concentrate to 80 gallons of water or approximately 1.5 fl. oz. per gallon. Spray trees thoroughly when crawlers are abundant in early spring and/or fall. For best results make a second application after ten days.

To control Spruce Woolly Aphid mix 1 gallon of concentrate to 25 gallons of water or 5 fl. oz. per gallon. Spray spruce thoroughly in fall or spring before females begin egg laying; on Douglas fir spray before bud break or in the fall after foliage has hardened off.

## DRAFT BACK PANEL (#4 of 6)

To control conifer aphids, sawfly larvae and pine needle scale mix 1 gallon of concentrate per 40 gallons of water or 3 fl. oz. per gallon and spray to thoroughly wet foliage when insects are present.

**NOTE:** Do not apply to chestnut, Japanese maple, mountain ash or Colorado blue spruce. Do not apply to ornamentals stressed by drought or when tender new foliage is present. Do not apply when leaf temperature exceeds 90 F. Test on Arbovitae, Eugenia and Euonymus for varietal and drought sensitivity.

Safer<sup>®</sup> Insecticidal Soap sprays may result in the temporary removal of the glaucous bloom from spruces.

To suppress gypsy moth populations, prevent egg hatch by applying a spray solution of 1 quart concentrate to 3 quarts of water directly to egg masses; do not allow spray to contact plant foliage.

**VEGETABLES GROWING OUTDOORS AND IN GREENHOUSES:** Mix two gallons of concentrate to 100 gallons water or 2.5 fl. oz. per gallon. Apply when insect or mite populations attain spray threshold. Spray to wet all infested plant surfaces. Application volume per acre sprayed will vary according to size and growth form of plants. Row crops will typically require 50 to 150 gallons of spray per acre. For most pests repeat application after several days to eliminate newly hatched individuals. Do not make more than 3 sequential applications over a two week period. May be used up to day of harvest.

**NOTE:** Do not apply during heat of the day or when leaf temperature exceeds 90 F.

**ROOT AND TUBER VEGETABLES:** Including (but not limited to) carrot, potato, radish and sugar beet to suppress aphids, and control leafhoppers, plant bugs and whitefly. Use up to day of harvest.

**BULB VEGETABLES:** Including (but not limited to) onion and garlic to suppress thrips. Use up to day of harvest.

**LEAFY VEGETABLES:** Including (but not limited to) lettuce, celery and spinach to control whitefly and mites and to suppress aphids. Use up to day of harvest.

**BRASSICA (cole) LEAFY VEGETABLES:** Including (but not limited to) broccoli, brussels sprouts, cabbage, Chinese cabbage (bok choy) and kale to control leafhoppers, plant bugs and whitefly and to suppress aphids. Use up to day of harvest.

**NOTE:** Do not spray crop prior to application of, or tank mix with a topically applied liquid nitrogen fertilizer.

**LEGUME VEGETABLES:** Including (but not limited to) beans, peas and soybeans to control aphids, grasshoppers, whitefly and spider mites. Use up to day of harvest.

**FRUITING VEGETABLES:** Including (but not limited to) eggplant, pepper and tomato, to control whitefly and spider mites and to suppress aphids. Use up to day of harvest.

**CUCURBIT VEGETABLES:** Including (but not limited to) cucumber, melon and summer squash to control plant bugs and whitefly and suppress aphids and mites. Use up to day of harvest.

Always apply to cucumbers at night or during the coolest part of the day.

## DRAFT BACK PANEL (#5 of 6)

**HERBS AND SPICES:** Including (but not limited to) basil, chives, dill, marjoram, and sage to control whitefly, and to suppress aphids and mites. Use up to day of harvest.

**FRUIT AND NUTS -** Mix two gallons of concentrate to 100 gallons of water or 2.5 fl. oz. per gallon. Spray when insects or mites first appear or when their populations attain spray level. Apply to achieve thorough coverage of infested foliage and/or branches. Repeat at weekly intervals as needed. Avoid spraying when blossoms are present. Use up to day of harvest.

**CITRUS FRUITS:** Including (but not limited to) sweet orange, lemon and grapefruit to control aphids, cottony cushion scale, black scale, red scale and mites. Use up to day of harvest.

**NOTE:** Some marking of fruit may occur, especially when spray run-off occurs or when sooty mold is present.

**POME FRUITS:** Including (but not limited to) apple and pear to control leaf hoppers, scale crawlers, pear psylla, pear slug (Tenthredinidae) and to suppress aphids and mites. Use up to day of harvest.

**NOTE:** Spray may cause localized marking of some varieties particularly apple varieties such as red and golden delicious, Gravenstein, and pear varieties such as d'Anjou, Comice and Asian.

**STONE FRUITS:** Including (but not limited to) cherry, peach and plums to control scale insects and suppress aphids and mites. Use up to day of harvest.

**NOTE:** Spray may cause localized spotting of nectarines and may remove wax bloom from plums.

**SMALL FRUITS AND BERRIES:** Including (but not limited to) blackberry, coffee, cranberry, grape and strawberry to control leafhoppers, mealybugs, scales and whitefly and to suppress aphids and mites. Use up to day of harvest.

**NOTE:** Do not spray grapes during the period between the start of blooming and 2 to 3 days post shatter. Applications made with dilute spray equipment (more than 75 gallons of spray per acre) and/or tank mixes containing sulfur may mark fruit of grapes; dilute applications are not recommended on varieties being grown for the fresh produce market including but not limited to flames, globes and perlettes as marking of fruits may occur. Do not use on Labrusca varieties or Italia and Calmeria varieties grown for the fresh market.

**TREE NUTS:** Including (but not limited to) almond, English walnut and pecan to control scale crawlers and suppress aphids and mites. Use up to day of harvest.



## DRAFT BACK PANEL (#6 of 6)

**ADDITIONAL CROPS:** Including (but not limited to) asparagus, coffee, cotton, and subtropical and tropical crops. Mix two gallons of concentrate to 100 gallons of water or 2.5 fl. oz. per gallon. To control aphids, whitefly and mites spray when insects appear and repeat at weekly intervals as needed. Do not use at intervals of less than seven days. Use up to day of harvest.

**NOTE:** Do not use on passion fruit or guava. Test for varietal sensitivity against other tropical fruits before full scale application.

**POST-HARVEST APPLICATIONS**

Safer<sup>R</sup> Insecticide Concentrate may be used alone or in tank mixes to control or suppress insect and mite pests of perennial crop plants after harvest has been completed.

Post-harvest applications provide a means of reducing residual populations, and are a useful component of IPM programs.

EPA Reg. No. 42697-1

California Reg. No. 42697-1-ZA

EPA Est. No. 907-TN-01      <sup>V</sup>      <sup>C</sup>      <sup>B</sup>      4091-CA-001      4091-TN-03

Superscript V, C, B corresponds to the first letter of lot number on the container.

Safer<sup>R</sup> is a registered trademark of Safer, Inc.