

MAR 18 2004

Brian Brosdahl
Ecolab Incorporated
370 North Wabasha Street
St. Paul, MN 55102-1390

**Subject: Tsunami 100
EPA Reg. No. 1677-164
Your Amendment Dated 12/12/03**

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, to provide a revised basic Confidential Statement of Formula (CSF), dated 3/10/04, and a revised label, is acceptable with the following comments.

The only change to the submitted label is that it corrects the active ingredient percentages so that they exactly match the revised CSF. The last submitted label dated 8/21/02 incorrectly lists peroxyacetic acid at 15.0 % and hydrogen peroxide at 11.0 %. The new label now correctly lists these actives at 15.2% and 11.2%, respectively. The revised basic CSF dated 3/10/04 supercedes all prior basic CSF's for this product.

A copy of the label stamped "Accepted" is enclosed.

If you have any questions about the comments in this letter, please feel free to contact Tony Kish at 703-308-9443, or myself at 703-308-6341.

Sincerely,
Tony Kish
Marshall Swindell,
Product Manager Team 33,
Regulatory Management Branch I
Antimicrobials Division (7510C)

CONCURRENCES

SYMBOL	SURNAME	DATE						

2 8 4

Tsunami 100

Water Additive for Controlling the Growth of
Microorganisms that cause decay and spoilage
On Fresh Cut, Post Harvest, and Further Processed
Fruits and Vegetables in transport, storage and processing

Active Ingredients:

Peroxyacetic acid..... 15.2%

Hydrogen peroxide..... 11.2%

Inert Ingredients: 73.6%

Total: 100.0%

**KEEP OUT OF REACH OF CHILDREN
DANGER**

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CORROSIVE: Causes severe eye damage and skin burns. Harmful or fatal if swallowed. Do not get in eyes, on skin, or on clothing. Wear chemical goggles, rubber gloves, and protective clothing if handling concentrate. Wash thoroughly with soap and water after handling. Remove any contaminated clothing and wash before re-use.

FIRST AID

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 -20 minutes. Call a poison control center or doctor for treatment advice.

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.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not anything by mouth to an unconscious person.

FOR EMERGENCY MEDICAL INFORMATION CALL TOLL-FREE: 1-800-328-0026

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

PHYSICAL AND CHEMICAL HAZARDS:

Strong oxidizing agent. Corrosive. Do not use in concentrated form. Mix only with water according to label instructions. Never bring concentrate in contact with other sanitizers, cleaners or organic substances.

ENVIRONMENTAL HAZARDS: This product is toxic to birds, fish, and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Oxy-15 is intended for use in the control of microorganisms (or bacteria) which cause decay (and/or spoilage) and that may be present in the process water and on the surface of fresh cut and post-harvest fruits and vegetables, as well as processed fruits and vegetables. Examples of process water are flumes, chill tanks and wash water systems. This product is not intended for control of any public health organisms.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

MAR 18 2004

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

1677-164

3 7 4

DIRECTIONS FOR USE

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

FOR TREATMENT OF PROCESS WATER SYSTEMS:**A. Batch systems with no makeup water added:**

1. Fill vessel containing fruits or vegetables with known amount of water.
2. Ensure that water is recirculating in vessel.
3. Add Oxy-15 to no more than 533 ppm (wt/wt) total product (80 ppm residual peroxyacetic acid) in use solution. This can be accomplished by initially adding 53.3 grams (47.8 mls) Oxy-15 per 100 liters of water, or 1.0 fluid ounce Oxy-15 per 16.4 gallons of water.
4. Contact time of 45 seconds minimum is recommended.

B. Continuous systems with constant addition of makeup water:

Initial dose: (this brings the recirculating process water up to an initial properly dosed level of Oxy-15).

1. Ensure that system is recirculating with known amount of water in vessels and piping.
2. Add initial dose of Oxy-15 to no more than 553 ppm (wt/wt) total product (80 ppm residual peroxyacetic acid) in use solution. This can be accomplished by adding 53.3 grams (47.8 mls) Oxy-15 per 100 liters of water, or 1.0 fluid ounce Oxy-15 per 16.4 gallons of water.
3. Contact time of 45 seconds minimum is recommended.

Continuous dose: (ensures steady state dosing of Oxy-15 is maintained). Meter no more than 533 ppm (wt/wt) Oxy-15 total product (80 ppm residual peroxyacetic acid) in proportion to the fresh makeup water added to the system. For example, makeup water flow rates of 16.4 gallons per minute would require a maximum of 1 fluid ounce (29.6 mls) per minute of Oxy-15. Makeup water flow rates of 100 liters per minute would require a maximum of 53.3 grams (47.8 mls) per minute of Oxy-15. Contact time of 45 seconds minimum is recommended.

FOR TREATMENT OF FRUIT AND VEGETABLE SURFACES:

Mix Oxy-15 with water either batchwise or continuously to no more than 533 ppm (wt/wt) total product (80 ppm residual peroxyacetic acid) in use solution. This can be accomplished by initially adding 53.3 grams (47.8 mls) Oxy-15 per 100 liters of water, or 1.0 fluid ounces Oxy-15 per 16.4 gallons of water. The fruits and vegetables can be sprayed or submerged in the resulting solution for a minimum contact time of 45 seconds, followed by adequate draining.

FOR TREATMENT OF SEEDS NOT INTENDED FOR HUMAN OR ANIMAL CONSUMPTION:

Apply to seeds as directed to control seedborne microorganisms that cause plant disease or spoilage and decay of developing seedlings. Only treat seeds of the crops listed on this label. Mix Oxy-15 with clean water either batchwise or continuously to no more than 10,600 ppm (wt/wt) total product (1600 ppm residual peroxyacetic acid) in use solution. This can be accomplished by adding 1,066 grams (957 mls) Oxy-15 per 100 liters of water, or 20 fluid ounces Oxy-15 per 16.4 gallons of water. The volume of treatment solution should be at least two times greater than the volume of seeds to be treated. The seeds should be submerged in the treatment solution and agitated for 30 minutes. Following treatment, remove seeds from treatment solution and dry.

STORAGE & DISPOSAL:**DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL**

STORAGE: Product should be kept cool and in a vented container to avoid any explosion hazard.

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 at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

[50 gallon drum] Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[300 gallon tote] Verify that the tote is empty. Do not rinse or clean. Seal tote and contact Ecolab for return.

ACCEPTED
with COMMENTS
in EPA Letter D-04-02

MAR 18 2004

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the purposes,
registered under EPA Reg. No. 71677-164

Oxy-15 can be used on the following types of fresh, post harvest and further processed fruits and vegetables:

Vegetables

- ◆ Root and tuber vegetables: Carrot, potato, radish, rutabaga, sweet potato, yam, sugar beet
- ◆ Leaves of root and tuber vegetables: Turnip greens and sugar beet
- ◆ Bulb vegetables: Onion (dry bulb and green), leek, garlic, shallot
- ◆ Leafy vegetables: Lettuce (head and leaf), celery, fennel, endive, escarole, parsley, radicchio, rhubarb, spinach
- ◆ *Brassica* leafy vegetables: Broccoli, Brussel sprouts, cabbage, cauliflower, mustard greens, mustard spinach
- ◆ Legumes [succulent or dried], bean (green, kidney, lima, mung, navy, pinto, snap, wax), pea (chickpea, lentil, dwarf, garden, English, field, edible pea pod), alfalfa, and soybean
- ◆ Fruiting vegetables: Pepper (bell, pimento, hot, sweet), tomato, tomatillo, eggplant
- ◆ Cucurbits: Cucumber, melon (cantaloupe, crenshaw melon, honeydew, honey ball melon, mango melon, muskmelon, pineapple melon, watermelon), summer squash, pumpkins, winter squash

Fruits

- ◆ Citrus fruits: Sweet and sour orange, lemon, lime, tangelo, tangerine, mandarin, citrus citron, kumquats, grapefruit
- ◆ Pome fruits: Apples and pears
- ◆ Stone fruits: Sour and sweet cherry, peach, nectarine, plum, prune
- ◆ Small Fruits and berries: Blackberries, blueberries, red and black raspberries

Sprouts and seeds of: vegetables and fruits that are listed on this label including, root & tuber vegetables, bulb vegetables, leafy vegetables, *Brassica* leafy vegetables, legumes, fruiting vegetables, cucurbits, citrus fruits, pome fruits, stone fruits, small fruits and berries, mustard

Tree nuts: Almond, Brazil, filbert, cashew, pecan, walnut (black & English), macadamia, chestnut

Cereal grains: Corn, barley, oats, rice, wheat, triticale, wild rice, sweet corn

Herbs and Spices: Basil, chives, coriander, dill, lemongrass, marjoram, sage, savory, tarragon, thyme

Miscellaneous: Asparagus, avocado, artichoke, banana, cranberry, fig, grape, kiwifruit, mango, mushroom, okra, peanut, persimmon, pineapple, raisins, strawberry, water chestnut, watercress

FOR COMMERCIAL OR INSTITUTIONAL USE ONLY
STRONG OXIDIZING AGENT

<p>Net Contents: 50 U.S. Gals. (189 Liters) or 300 U.S. Gals. (tote)</p>
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EPA Reg. No. 1677-164

EPA Est.: 1677-MN-1 (P), 60156-IL-1 (SI), 1677-CA-2 (R), 1677-TX-1 (D), 1677-OH-1 (H), 1677-IL-2 (J), 1677-PR-1 (B), 1677-CA-1 (S), 1677-NJ-1 (W), 1677-GA-1 (M)

Superscript refers to first letter of date code

Manufactured by:
Food & Beverage Division
Ecolab Inc.
370 N. Wabasha Street
St. Paul, MN 55102

ACCEPTED
with COMMENTS
in EPA Letter Dated:

MAR 18 2004

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No.
1677-164

U.S. Patent No. 5,409,713 Other Patents Pending