1677-164 12-08-2009 1/6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

DEC 8 2009

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Mr. Theodore Head
Manger, Product Registration & Compliance
Law & Regulatory Affairs for,
Ecolab, Inc.
370 N. Wabasha Street
Saint Paul, MN 55102

Subject: Tsunami 100
EPA Registration Number 1677-164
Your Notification Dated September 11th, 2009
EPA Received Date September 14th, 2009

The notification referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, FIFRA, as amended, to increase contact time from 45 to 90 seconds as per request from the EPA office of California, is acceptable.

The notification has been made part of the file.

If you have questions concerning this letter, please contact Karen M. Leavy at (703)-308-6237.

Sincerely,

M Swindell

Marshall Swindell
Product Manager 33
Regulatory Management Branch I
Antimicrobials Division(7510P)

Please read instructions on reverse before completing fc F pproved. OMB No. 2070-0060 Approval Expires 5-31-98

United States
Environmental Protection Agency
Washington, DC 20460

EPA

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
1677-164	**Marshall Swindell**	☒ None ☐ Restricted
4. Company/Product (Name) **Tsunami 100**	PM# **33**	

5. Name and Address of Applicant (Include ZIP Code)
Ecolab Inc.
370 N. Wabasha Street
St. Paul, MN 55102

☐ *Check if this is a new address*

6. Expedited Review. In accordance with FIFRA Section 3 (c) (3) (b) (i), my product is similar or identical in composition and labeling to:
EPA Reg. No._____
Product Name _____

Section – II

☐ Amendment – Explain below.
☐ Resubmission in response to Agency letter dated
☒ Notification – Explain below.
☐ Final printed labels in response to
☐ "Me Too" Application.
☐ Other – Explain below.

Explanation: Use additional Page(s) if necessary. (For section I and Section II)

Notification of change in contact time per PR Notice 98-10. This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section – III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
☐ Yes* ☒ No	☐ Yes ☒ No	☐ Yes ☒ No	☐ Metal ☒ Plastic ☐ Glass ☐ Paper ☐ Other (Specify)_____
**** Certification must be submitted***	If "Yes" Unit Packaging wgt. / No. per Container	If "Yes" Unit Package wgt. / No. Per Container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
☒ Label ☐ Container	**4, 50, 300 gallons**	☒ On Label ☐ On Labeling accompanying product

6. Manner in Which Label is Affixed to Product ☐ Lithograph ☒ Paper glued ☐ Stenciled ☐ Other _____

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted if necessary to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Theodore D. Head	**Product Registration Manager**	**(651) 293-4026**

Certification

I certify that the statements which I have made on this form and all attachments are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title	
	Product Registration Manager	
3. Typed Name **Theodore D. Head**	4. Date 9-11-09	

ECOLAB®

Regulatory Affairs

Ecolab Inc.
370 N. Wabasha Street
St. Paul, MN 55102

September 11, 2009

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

ATTN: Marshal Swindell, PM-33

Subject: Label Notification in accordance with PR Notice 98-10
Tsunami 100, EPA Reg. No. 1677-164

Dear Marshall:

Enclosed please find two copies of our proposed label to in increase contact time from 45 to 90 seconds. This was a typographical error in the last EPA stamped approved label which California has requested that we correct. All changes to the label are highlighted in red.

If you have any questions or the need for additional information please do not hesitate to contact me at the address above or via e-mail ted.head@us.nufarm.com.

Sincerely,

Theodore Head
Manager, Product Registration & Compliance - EPA
Law & Regulatory Affairs

Tsunami 100

Water Additive for Pathogen* Reduction in
Fruit and Vegetable Processing Water and Controlling the Growth of Spoilage and Decay Causing Non-Public Health Organisms on Fruit and Vegetable Surfaces

For Organic Production.

Tsunami 100 may be used as a water additive in fruit and vegetable processing water on products labeled as organic in food processing facilities on both raw agricultural commodities and on fruits and vegetables that will be further processed.

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 and before eating, drinking, and chewing gum, or using tobacco. 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 give anything by mouth to an unconscious person.
FOR EMERGENCY MEDICAL INFORMATION CALL TOLL-FREE: 1-800-328-0026
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
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.

Used as directed, *Tsunami 100* reduces 99.9% of the pathogens *Escherichia coli* O157:H7*, *Listeria monocytogenes** and *Salmonella enterica.** in fruit and vegetable processing waters. *Tsunami 100* also provides control of spoilage and decay causing non-public health organisms present in processing waters and on the surface of post-harvest, fresh-cut and processed fruits and vegetables.

DIRECTIONS FOR USE

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

FOR PATHOGEN* REDUCTION AND CONTROL IN FRUIT AND VEGETABLE PROCESSING WATERS:

A. Batch systems with no makeup water added:
   1. Ensure that water is mixing in the processing vessel.
   2. Add *Tsunami 100* at a rate from 2.5-6.7 fluid ounces per 100 gallons of process water. This will produce about 215-575 ppm total product and about 30-80 ppm peroxyacetic acid. At this use dilution, *Tsunami 100* will provide a 99.9% reduction against the pathogens *Escherichia coli* O157:H7*, *Listeria monocytogenes** and *Salmonella enterica.**.
   3. Measure the residual peroxyacetic acid concentration in the water using a Test Kit (consult Ecolab Representative) and adjust dose as needed. Allow a 1.5 minute mixing time.

B. Continuous systems with makeup water continuously added:

Initial dose:

1. Ensure that water is mixing in the processing vessel and/or piping.
2. Add *Tsunami 100* at a rate from 2.5-6.7 fluid ounces per 100 gallons of process water. This will produce about 215-575 ppm total product and about 30-80 ppm peroxyacetic acid. At this use dilution, *Tsunami 100* will provide a 99.9% reduction against the pathogens *Escherichia coli* O157:H7*, *Listeria monocytogenes** and *Salmonella enterica.**.
3. Measure the residual peroxyacetic acid concentration in the water using a Test Kit (consult Ecolab Representative) and adjust dose as needed. Allow a 1.5 minute mixing time.

Continuous Dosing:

Meter *Tsunami 100* at a rate from 2.5-6.7 fluid ounces per 100 gallons of fresh makeup water added to the system. This will produce about 215-575 ppm total product and about 30-80 ppm peroxyacetic acid. Measure the residual peroxyacetic acid concentration in the water using a Test Kit (consult Ecolab Representative) and adjust dose as needed. Allow a 1.5 minute mixing time.

FOR TREATMENT OF FRUIT AND VEGETABLE SURFACES AND PROCESS WATERS:

Mix *Tsunami 100* with water either batchwise or continuously to produce about 36 - 575 ppm total product and about 5 - 80 ppm peroxyacetic acid in use solution. This can be accomplished by initially adding *Tsunami 100* at a rate from 0.42 - 6.7 fluid ounces per 100 gallons of process water. The fruits and vegetables can be sprayed or submerged in the resulting solution for a minimum contact time of 90 seconds, followed by adequate draining. At this use dilution, *Tsunami 100* will control the growth of spoilage and decay causing non-public health organisms in process waters and on the surface of fruits and vegetables. This product is not intended for control of any public health organisms on fruit and vegetable surfaces.

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 *Tsunami 100* with clean water either batchwise or continuously to no more than 11,500 ppm total product (1750 ppm residual peroxyacetic acid) in use solution. This can be accomplished by adding 20 fluid ounces *Tsunami 100* 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.

Tsunami 100 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

STORAGE & DISPOSAL:

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL

PESTICIDE 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:

[4 gallon or 50 gallon] 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.

FOR COMMERCIAL ~~OR INSTITUTIONAL~~ USE ~~ONLY~~

STRONG OXIDIZING AGENT

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-CA-1 (S), 1677-GA-1 (M), 1677-WV-1 (V)
Superscript refers to first letter of date code

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

Net Contents:
4 U.S. Gallons (15.1 liters)
50 U.S. Gallons (189 liters)
300 U.S. Gals. (1134 liters)