

71512-3

7/29/2009

10 of 13



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Mike Peplowski
ISK Biosciences
7470 Auburn Road, Suite A
Concord, Ohio 44077

JUL 29 2009

**RE: Amendment Dated 8/27/08
PRIA Decision 399609
Ranman 400SC; EPA Reg. No. 71512-3**

Dear Mr. Peplowski:

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, to add new uses for fruiting vegetable crop group 8; okra; and grapes east of the Rocky Mountains, is acceptable providing you submit the conditional data as listed below, and submit a final printed label within 45 days from the date of this letter, which makes the changes herein:

Conditional Data Requirements – the following must be submitted by 7/31/2012:

- 1. As part of the new 40CFR §158 Guidelines, a functional immunotoxicity study in rats and/or mice is required (Guideline 870.7800).
- 2. As part of the new 40CFR §158 Guidelines, a subchronic neurotoxicity study is required (Guideline 870.6200).

Label Changes Page 2 ✓ done

Change "should" to "must" in the "Environmental Hazards".

By separate amendment or notification as appropriate (not as a final printed label), harmonize the "Container Disposal" with PR Notice 2007-4. ✓ done

In the greenhouse use restriction statement, add "fruiting vegetables (other than tomato transplants)". ✓ done

Label Changes Page 3

In "Mixing and Spraying", at the end of the surfactant sentence add "except for grapes and tomato greenhouse transplant production". ✓ done

In the "Tank Mix Compatibility" section, change "mix partners should be" to "mix partners must be". Also change "A jar test should be conducted" to "Conduct a jar test...". *Done*

Label Changes Page 6

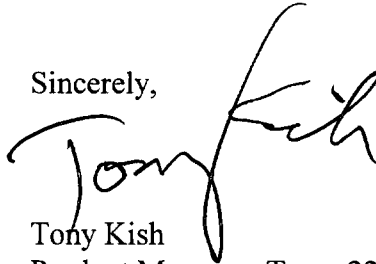
Though approved prior by mistake, delete the footnote #1 at the bottom which allows crops not listed on the label. All intended crops must be listed, and this label approval is limited to the crops listed on this label.

Label Last Page

In the warranty section, add "To the extent consistent with applicable law" prior to "Buyers and users of this product assume the risk...directions"; and prior to Buyers and users of this product are responsible for all loss...practices".

Attach a copy of this letter with your final printed label. Enclosed please find a copy of the label stamped "Accepted With Comments". If you have questions concerning this letter, please contact me at 703-308-9443.

Sincerely,



Tony Kish
Product Manager, Team 22
Fungicide Branch
Registration Division (7505P)



RANMAN® 400SC

AGRICULTURAL FUNGICIDE

| FIRST AID | |
|--|--|
| If on skin | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of soap and water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. |
| If in eyes | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have 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. |
| If inhaled | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice. |
| Have the product container or label with you when calling a poison control center or doctor, or going for treatment. | |
| HOT LINE NUMBER | |
| For 24-Hour Medical Emergency Assistance (Human or Animal) Call 1-888-484-7546. | |
| For Chemical Emergency, Spill, Leak, Fire or Accident, Call CHEMTREC 1-800-424-9300. | |

ACTIVE INGREDIENT: Cyazofamid* 34.5%
 OTHER INGREDIENTS: 65.5%
 Total..... 100.0%

*4-chloro-2-cyano-*N,N*-dimethyl-5-(4-methylphenyl)-1*H*-imidazole-1-sulfonamide (CA)

Contains 3.33 pounds Cyazofamid Per Gallon (400 grams per liter)

KEEP OUT OF REACH OF CHILDREN

CAUTION

See side panel for additional precautionary statements.

Read entire label carefully and use only as directed.

ISK Biosciences Corporation
 7470 Auburn Road, Suite A
 Concord, Ohio 44077 U.S.A.

EPA Reg. No. 71512-3

EPA Est. No.

Manufactured in France

Net Contents: 2.5 Gallons

**ACCEPTED
 with COMMENTS
 in EPA Letter Dated
 JUL 29 2009**

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

71512-3

30413

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. DO NOT take internally.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, socks, shoes, and chemical resistant gloves made of any waterproof material.

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Do not allow contact of contaminated clothing with unprotected skin. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

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.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

User Safety Recommendations

Users should:

- * Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.
- * Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

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 waters when disposing of equipment wash waters or rinsate.

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE STORAGE: Store in original container, in a secured, dry place separate from fertilizer, food, and feed.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray 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: DO NOT reuse empty container. Triple rinse (or equivalent) and 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.

DIRECTIONS FOR USE

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

FAILURE TO FOLLOW THE USE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

Do not use for disease control on tomatoes or cucurbit vegetables grown for fruit production in greenhouses.

ROTATIONAL CROP RESTRICTIONS

Crops on this label may be planted immediately after the last treatment. Do not plant other crops not registered for this product within 30 days after the

last application.

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 (PPE), 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 twelve (12) hours.

PPE required for early entry to the 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, chemical resistant gloves made of any waterproof material, shoes plus socks and protective eyewear.

GENERAL INFORMATION

MIXING AND SPRAYING

RANMAN 400SC can be used effectively in dilute or concentrate sprays. Thorough, uniform coverage is essential for disease control.

NOTE: Slowly invert container several times to assure uniform mixture of formulation before adding this product to the spray tank.

Dosage rates on this label indicate fluid ounces of RANMAN 400SC per acre, unless otherwise stated. Under conditions favorable for disease development, the highest rate specified and shortest application interval should be used. For best product performance in all applications utilizing

water volumes up to 60 gallons per acre, an organosilicone surfactant should be added according to the manufacturer's label recommendations in order to improve spray coverage when the disease infection is severe. However, a non-ionic surfactant or a blend of an organosilicone and a non-ionic surfactant may be used according to the manufacturer's label when disease infection is moderate or light.

RANMAN 400SC may be applied with all types of spray equipment normally used for ground and aerial applications.

The required amount of RANMAN 400SC should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of RANMAN 400SC in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations. DO NOT allow spray mixture to stand overnight or for prolonged periods. Prepare only the amount of spray required for immediate use. Spraying equipment should be thoroughly cleaned immediately after the application.

Apply RANMAN 400SC in sufficient water to obtain adequate coverage of the foliage. Gallonage to be used will vary with crop and amount of plant growth. Spray volume will usually range from 20 to 100 gallons per acre (200 to 1000 liters per hectare) for dilute sprays, and 5 to 10 gallons per acre (50 to 100 liters per hectare) for concentrate ground and aerial sprays. For aerial applications, apply RANMAN 400SC in a minimum of 5 gallons of water per acre. Application through sprinkler irrigation systems is not recommended unless specific directions are given for a crop. See application and calibration instruction below.

TANK MIX COMPATIBILITY

RANMAN 400SC is physically compatible (no nozzle or screen blockage) with many products recommended for control of diseases and insects on vegetable crops. Read and follow all manufacturer's label recommendations for the tank mix companion product. It is the applicator's responsibility to ensure that the companion product is EPA approved for use on the intended crop. RANMAN 400SC is generally compatible with other insecticides, fungicides, fertilizers and micronutrient products provided sufficient free water is available for dispersion of all the tank mix products. However, the physical compatibility of RANMAN 400SC with tank mix partners should be evaluated before use. A jar test should be conducted with intended tank-mix pesticides prior to preparation of large volumes. Use the following

procédure: 1) Pour the recommended proportions of the products into a suitable container of water, 2) Mix thoroughly and 3) Allow to stand 5 minutes. If the combination remains mixed or can be re-mixed readily, it is considered physically compatible. Any physical incompatibility in the jar test indicates that RANMAN 400SC should not be used in the tank-mix.

RANMAN 400SC is physically compatible (no nozzle or screen blockage) with the following list of products:

| <u>Product</u> | <u>Active Ingredient</u> |
|--------------------------|---------------------------|
| Acrobat | dimethomorph |
| Applaud | buprofezin |
| BT (several) | Bacillus thuringiensis |
| Chlorothalonil (several) | chlorothalonil |
| Curzate | cymoxanil |
| Decis | deltamethrin |
| EDBC (several) | mancozeb |
| Guthion | azinphos-methyl |
| Headline /Cabrio | pyraclostrobin |
| Karate | lambda-cyhalothrin |
| Lannate | methomyl |
| Mineral oils | |
| Monitor / Tamaron | methamidophos |
| Omega | fluazinam |
| Previcur | Propamocarb hydrochloride |
| Provado | imidacloprid |
| Quadris /Abound | azoxystrobin |
| Thiodan | endosulfan |
| Trigard | cyromazine |

CROP RESPONSE

RANMAN 400SC is not phytotoxic to the crop or succeeding crops when applied according to label instructions.

INTEGRATED PEST MANAGEMENT

RANMAN 400SC is an excellent disease control agent when used according to label directions for control of several Oomycete fungi. Although RANMAN 400SC has limited systemic activity, it should be utilized as a protectant fungicide and applied before the disease infects the crop. Depending upon the level of disease pressure, good protection of the crop against disease can be expected over a period of 7 to 10 days. RANMAN 400SC is recommended for use as part of an Integrated Pest Management (IPM) program, which may include the use of disease-resistant crop varieties, cultural practices, crop rotation, biological disease control agents, pest scouting and disease forecasting systems aimed at preventing economic pest damage. Practices known to reduce disease development should be followed. Consult your state cooperative extension service or local agricultural authorities for additional IPM strategies established in your area. RANMAN 400SC may be used in State Agricultural Extension advisory (disease forecasting) programs that recommend application timing based upon environmental factors that favor disease development.

RESISTANCE MANAGEMENT

Some plant pathogens are known to develop resistance to products used repeatedly for disease control. RANMAN 400SC's mode/target site of action is complex III of fungal respiration: ubiquinone reductase, Qi site, FRAC code 21. A disease management program that includes alternation or tank mixes between RANMAN 400SC and other labeled fungicides that have a different mode of action and/or control pathogens not controlled by RANMAN 400SC is essential to prevent disease resistant pathogens populations from developing. RANMAN 400SC should not be utilized continuously nor tank mixed with fungicides that have shown to have developed fungal resistance to the target disease.

Since pathogens differ in their potential to develop resistance to fungicides, follow the directions outlined in the "Directions For Use" section of this label for specific resistance management strategies for each crop. Consult with your Federal or State Cooperative Extension

Service representatives for guidance on the proper use of RANMAN 400SC in programs that seek to minimize the occurrence of disease

resistance. RANMAN 400SC is not cross-resistant with other classes of fungicides that have different modes of action.

| DIRECTIONS FOR USE | | | |
|--------------------|---|---|---|
| Crop | Diseases | Use Rate Fl. Oz. Product Per Acre (lb. ai/A) | Instructions |
| Carrot | <p>Cavity spot (<i>Pythium ultimum</i>)</p> <p>Root Dieback (<i>P. violae</i>, <i>P. sulcatum</i>)</p> <p>Forking (<i>P. irregulare</i>, <i>P. splendens</i>)</p> | <p>6 (0.156)</p> | <p>Resistance Management: DO NOT apply more than 5 sprays of Ranman 400SC per crop. Alternate sprays of Ranman 400SC with a fungicide with a different mode of action.</p> <p>Application instructions: Pre-plant incorporated (broadcast or band): Apply in sufficient water to obtain adequate coverage within 3 days of planting and mechanically till into the soil to a depth of at least 2 inches or incorporate with at least 1/4 inch of water.</p> <p>Surface applications (broadcast or band): Subsequent applications may be made beginning at 14 days after plant emergence and continue on a 14-21 day schedule. Apply in sufficient water to obtain adequate coverage with the applications directed to the base of the plant. Ranman 400SC should be incorporated into the soil with 1/2 to 1 inch of water. If irrigation is not immediately available after the application, then the application should be made in sufficient water to allow penetration into the soil.</p> <p>Ranman 400SC may be applied via any overhead irrigation system. Follow directions outlined in the Application and Calibration Techniques For Sprinkler Irrigation section of the label. Ranman 400SC should be applied during the last 2 hours of the irrigation cycle to allow for adequate soil penetration.</p> <p>For banded applications a 6 to 8 inch band is recommended (See formula to calculate amount required in the band).</p> <p>Calculate the amount of Ranman 400SC needed for band treatments by the formula:</p> $\frac{\text{band width in inches}}{\text{row spacing in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$ <p>Restrictions DO NOT use more than 30 fl oz per growing season. DO NOT use any adjuvant when applying to carrots. DO NOT apply within 14 days of harvest. Crops on this label may be planted immediately after the last treatment. Do not plant other crops not registered for this product within 30 days after the last application.</p> |

70413

| Crop | Diseases | Use Rate Fl. Oz. Product Per Acre (lb. ai/A) | Instructions |
|--|---|--|--|
| CUCURBITS¹ Cantaloupe Chayote Chinese-waxgourd Citron Melon Cucumbers Gherkin Gourds Honeydew melons Momordica spp. Muskmelon Watermelon Pumpkin Squash Zucchini | Downy mildew <i>(Pseudoperonospora cubensis)</i> Phytophthora blight <i>(Phytophthora capsici)</i> | 2.1 to 2.75 (0.054 to 0.071) 2.75 (0.071) | <p>Resistance Management: DO NOT apply more than six sprays of RANMAN 400SC per crop. Alternate sprays of RANMAN 400SC with a fungicide with a different mode of action. DO NOT make more than three consecutive applications of RANMAN 400SC followed by at least three applications of fungicides having different modes of action before applying additional RANMAN 400SC.</p> <p>Application instructions: For Downy mildew control, make fungicide applications on a 7- to 10-day schedule beginning with initial flowering or when disease conditions are favorable for disease development, but prior to disease development. Use the low rate and long interval as disease preventative sprays or when disease conditions are low. Increase to highest rate and shortest interval under moderate to heavy disease pressure.</p> <p>For Phytophthora blight control, apply RANMAN 400SC to the base of the plants at the time of transplanting. Alternatively, RANMAN 400SC may be applied in transplant water at the time of transplanting. Apply 2.75 fl oz per acre in the transplant water. It is recommended that the water volume for this initial application be at least 50 gallons per acre. Additional applications should be made on a 7- to 10-day schedule beginning when conditions are favorable for disease development.</p> <p>RANMAN 400SC should be tank-mixed with an organosilicone surfactant when the disease infection is severe, or a non-ionic surfactant or a blend of an organosilicone and a non-ionic surfactant when disease infection is moderate or light, at the manufacturer's label recommendations for water volumes up to 60 gallons per acre. Normal water volumes are 20 to 50 gallons per acre.</p> <p>RANMAN 400SC may be applied through sprinkler irrigation equipment. See calibration directions following this section.</p> <p>Restrictions DO NOT apply more than 16.5 fluid ounces (0.43 lb a.i.) per acre per crop growing season.</p> <p>The Pre-Harvest Interval (PHI) for this crop group is 0-day.</p> <p>Crops on this label may be planted immediately after the last treatment. Do not plant other crops not registered for this product within 30 days after the last application.</p> |

Deleted: 1

¹This includes all members of the Cucurbit Vegetables Crop Group 9, such as, but not limited to, the crops listed in this table.

| Crop | Diseases | Use Rate Fl. Oz. Product Per Acre (lb. ai/A) | Instructions |
|------|----------|---|--------------|
| | | | |

80413

| | | | |
|--|--|---|--|
| <p>GRAPES East of the Rocky Mountains</p> | <p>Downy mildew (<i>Plasmopara viticola</i>)</p> | <p>2.1 to 2.75 (0.054 to 0.071)</p> | <p>Resistance Management: DO NOT apply more than six sprays of RANMAN 400SC per crop. Alternate sprays of RANMAN 400SC with a fungicide with a different mode of action. DO NOT make more than three consecutive applications of RANMAN 400SC followed by at least three applications of fungicides having different modes of action before applying additional RANMAN 400SC.</p> <p>Application instructions: For Downy mildew control, make fungicide applications on a 10- to 14-day schedule beginning when warning systems forecast disease infection periods or when disease conditions are favorable for disease development. Use the lowest rate and longest interval for preventative applications or very low disease pressure, increasing the rate and shortening the interval as disease pressure and/or fast crop development increases up to the maximum rate and shortest interval. Do not use any surfactant with this application.</p> <p>Application water volumes for ground applications should be at least 100 gallons per acre.</p> <p>RANMAN 400SC may be applied via aerial application using a minimum of 5 gallons of water volume per acre.</p> <p>Restrictions DO NOT apply more than 16.5 fluid ounces (0.43 lb. AI) per acre per growing season. The Pre-Harvest Interval (PHI) for this crop is 30 days.</p> |
|--|--|---|--|

90413

| Crop | Diseases | Use Rate Fl. Oz. Product Per Acre (lb. ai/A) | Instructions |
|--------|---|---|--|
| Potato | <p data-bbox="304 240 443 315">Late blight (<i>Phytophthora infestans</i>)</p> <p data-bbox="304 833 443 907">Pink Rot (<i>Phytophthora erythroseptica</i>)</p> | <p data-bbox="546 240 697 315">Foliar 1.4 to 2.75 (0.036 to 0.071)</p> <p data-bbox="546 833 697 1005">At Planting: 0.42 fl. oz./ 1000 linear ft [Equivalent to 6.1 fl. oz./A on 36" row spacing] (0.158)</p> <p data-bbox="546 1036 697 1110">Lay-by/Hilling: 2.75 fl. oz. /A (0.071)</p> | <p data-bbox="718 240 1629 367">Resistance Management: DO NOT apply more than 10 sprays of RANMAN 400SC per crop. Alternate sprays of RANMAN 400SC with a fungicide with a different mode of action. DO NOT make more than three consecutive applications of RANMAN 400SC followed by at least three applications of fungicides having different modes of action before applying additional RANMAN 400SC.</p> <p data-bbox="718 391 1656 563">For pink rot control, do not use RANMAN 400SC at reduced rates as incomplete control may occur promoting potential for development of resistant strains. Rotate other fungicides with a different mode of action or tank-mix these fungicides with RANMAN 400SC to reduce the chance of resistance occurring. Development of resistance cannot be predicted. If a treatment of RANMAN 400SC is not effective, a resistant strain of fungi may be present. Accordingly, neither RANMAN 400SC nor other fungicides with a similar mode of action will effectively control the disease. Consult your local State University for alternative recommendations.</p> <p data-bbox="718 587 1644 737">Application instructions: For Late blight control, make fungicide applications on a 7- to 10-day schedule beginning when warning systems forecast disease infection periods, generally at row closure or when conditions are favorable for disease development. Use the low rate and longest interval for preventative applications or very low disease pressure, increasing the rate and shortening the interval as disease pressure and/or fast crop development increases up to the maximum rate and shortest interval.</p> <p data-bbox="718 761 1619 810">For Late blight tuber rot control, make the last 2 to 3 applications prior to desiccation with RANMAN 400SC at 2.75 fl. oz. applied weekly.</p> <p data-bbox="718 834 1661 984">For pink rot control at planting, apply 0.42 fluid ounces product per 1000 linear foot of row in-furrow at planting using a minimum of 5 gallons of water per acre. Apply RANMAN 400SC using a 6 to 8 inch band directly over the seed pieces prior to furrow closure. A side dressing of RANMAN 400SC applied at hilling may be necessary for additional control. Where mefenoxam-resistant strains of <i>Phytophthora erythroseptica</i> are not present, a full rate of RANMAN 400SC can be tank-mixed with mefenoxam containing fungicides for additional control.</p> <p data-bbox="718 1008 1661 1135">For additional control of Pink Rot in combination with an at-planting, in-furrow, RANMAN 400SC application, apply RANMAN 400SC as a broadcast spray at 2.75 fluid ounces in a minimum of 20 gallons of finished spray solution per acre at hilling. Additional applications may be needed depending on susceptibility of potato varieties to pink rot disease, environmental conditions conducive to favor severe disease development, or fields located in long growing season areas, etc.</p> <p data-bbox="718 1159 1640 1279">Follow the guidelines for disease resistance management listed above. RANMAN 400SC should be tank-mixed with an organosilicone surfactant when the disease infection is severe, or a non-ionic surfactant or a blend of an organosilicone and a non-ionic surfactant when disease infection is moderate or light, at the manufacturer's label recommendations for water volumes up to 60 gallons per acre. Normal water volumes are 20 to 50 gallons per acre.</p> |

100413

| Crop | Diseases | Use Rate Fl. Oz. Product Per Acre (lb. ai/A) | Instructions |
|---|--|---|---|
| Potato (continued) | | | <p>RANMAN 400SC may be applied through sprinkler irrigation equipment. See calibration directions following this section.</p> <p>Restrictions DO NOT apply more than 27.5 fluid ounces per acre per year. DO NOT apply within 7 days of harvest. Crops on this label may be planted immediately after the last treatment. Do not plant other crops not registered for this product within 30 days after the last application.</p> |
| <p>FRUITING VEGETABLES (Crop Group 8) and OKRA, includes: Tomato; Ground Cherry; Tomatillo; Pepper (includes Bell, Chili, Cooking, Pimento, and Sweet Peppers); Eggplant; and Pepino</p> | <p>Late blight (<i>Phytophthora infestans</i>)</p> <p>Phytophthora blight (<i>Phytophthora capsici</i>).</p> | <p>2.1 to 2.75 (0.054 to 0.071)</p> <p>2.75 (0.071)</p> | <p>Resistance Management: DO NOT apply more than six sprays of RANMAN 400SC per crop. Alternate sprays of RANMAN 400SC with a fungicide with a different mode of action. DO NOT make more than three consecutive applications of RANMAN 400SC followed by at least three applications of fungicides having different modes of action before applying additional RANMAN 400SC.</p> <p>Application instructions: For Late blight control, make fungicide applications on a 7- to 10-day schedule beginning when warning systems forecast disease infection periods, generally at flower initiation or when conditions are favorable for disease development. Use the lowest rate and longest interval for preventative applications or very low disease pressure, increasing the rate and shortening the interval as disease pressure and/or fast crop development increases up to the maximum rate and shortest interval.</p> <p>For Phytophthora blight control, apply RANMAN 400SC to the base of the plants at the time of transplanting. Alternatively, RANMAN 400SC may be applied in transplant water at the time of transplanting. Apply 2.75 fl oz per acre in the transplant water. It is recommended that the water volume for this initial application be at least 50 gallons per acre. Additional applications should be made on a 7- to 10-day schedule beginning when conditions are favorable for disease development.</p> <p>RANMAN 400SC should be tank-mixed with an organosilicone surfactant when the disease infection is severe, or a non-ionic surfactant or a blend of an organosilicone and a non-ionic surfactant when disease infection is moderate or light, at the manufacturer's label recommendations for water volumes up to 60 gallons per acre. Normal water volumes are 30 to 60 gallons per acre.</p> <p>RANMAN 400SC may be applied through sprinkler irrigation equipment. See calibration directions following this section.</p> <p>Restrictions DO NOT apply more than 16.5 fluid ounces (0.43 lb a.i.) per acre per crop growing season . The Pre-Harvest Interval (PHI) for these listed crops is 0 day. Crops on this label may be planted immediately after the last treatment. Do not plant other crops not registered for this product within 30 days after the last application.</p> |

110813

| | | | |
|---|---|--|--|
| Tomato Greenhouse Transplants (Soil Drench) | Pythium Damping-off (<i>Pythium spp.</i>) | 3 fl oz/100 gallons water (0.078 lb a.i./ 100 gallons water) | Tomato Greenhouse Transplant Production: For control of damping-off caused by <i>Pythium spp.</i> make a single fungicide application to the seedling tray at the time of planting or at any time thereafter up until 1 week before transplanting. Apply the fungicide solution as a drench to thoroughly wet the growing medium. This results in the use of approximately 1 pint of solution per square foot if the growing medium is 4 inches deep. Do not use any surfactant with this drench application. |
|---|---|--|--|

APPLICATION AND CALIBRATION TECHNIQUES FOR SPRINKLER IRRIGATION

Apply this product only through center pivot, motorized lateral move, traveling gun, solid set or portable (wheel move, side roll, end tow, or hand move) irrigation system(s). DO NOT apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

DO NOT apply RANMAN 400SC through irrigation systems connected to a public water system. "Public water system" means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low-pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.

Always inject RANMAN 400SC into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

RANMAN 400SC may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.

A. Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment

For injection of pesticides, these continuously moving systems must use a positive displacement injection pump of either diaphragm or piston type, constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock and capable of injection at

120813

pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Thoroughly mix recommended amount of this product for acreage to be covered into the same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until this product has been cleared from the last sprinkler head.

B. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment

With stationary systems, an effectively designed in-line venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however, a positive-displacement pump can also be used.

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a 30 to 45 minute period. Mix desired amount of RANMAN 400SC for acreage to be covered with water so that the total mixture of this product plus water in the injection tank is equal to the quantity of water used during calibration.

Agitation is recommended. RANMAN 400SC can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until this product has been cleared from last sprinkler head.

ISK Biosciences Corporation
7470 Auburn Road, Suite A
Concord, Ohio 44077 U.S.A.

WARRANTY AND LIMITATION OF DAMAGES

Seller warrants to those persons lawfully acquiring title to this product that at the time of first sale of this product by Seller that this product conformed to its chemical description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions under normal conditions of use, and Buyers and users of this product assume the risk of any use contrary to such directions. **EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESS REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO.** In no event shall Seller's liability for any breach of warranty or guaranty exceed the purchase price of the product as to which a claim is made. Buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of Seller, including, but not limited to, incompatibility with other products unless otherwise expressly provided in Directions for Use of this product, weather conditions, cultural practices, moisture conditions or other environmental conditions outside of the ranges that are generally recognized as being conducive to good agricultural and/or horticultural practices.

Ranman[®] Is a registered trademark of Ishihara Sangyo Kaisha, Ltd.

Ranman - 090528

130413