

34704-909

06-22-2011

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

JUN 22 2011

Premjit Halarnkar, Ph.D.  
Registration Manager  
Loveland Products  
P.O. Box 1286  
Greeley, CO 80632-1286

Subject: Radiate, EPA Reg. No: 34704-909  
Application for Label Amendment via Notification dated May 20, 2011

Dear Dr. Halarnkar:

The Biopesticides and Pollution Prevention Division is in receipt of your application for Notification under PRN 98-10 dated above. A preliminary screen of this request has been conducted for its applicability under PRN 98-10 and it has been determined that the action(s) requested falls within the scope of PRN 98-10. Our records have been duly noted, and the label submitted with this application has been stamped "Notification, received and reviewed" and will be placed accordingly in our records.

Questions concerning this action should be directed to John Fournier at (703) 308-0169 or email at [fournier.john@epa.gov](mailto:fournier.john@epa.gov).

Sincerely,

*Linda Hollis*

Linda Hollis, Chief  
Biochemical Pesticides Branch

CONCURRENCES  
Biopesticides and Pollution Prevention Division

SYMBOL	▶ 7511P			(7511P)			
SURNAME	▶ Fournier						
DATE	▶ 22 Jun 11						



United States  
Environmental Protection Agency  
Washington, DC 20460

<input type="checkbox"/>	Registration
<input type="checkbox"/>	Amendment
<input checked="" type="checkbox"/>	Other

OPP Identifier Number

### Application for Pesticide - Section I

1. Company/Product Number Loveland Products, Inc. / 34704-909	2. EPA Product Manager Linda Hollis	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Radiate	PM# 91	
5. Name and Address of Applicant (Include ZIP Code) Loveland Products, Inc. P.O. Box 1286 Greeley, Colorado 80632-1286 <input type="checkbox"/> 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

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

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

Notification - Addition of Storage and Disposal language on label.

### Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal	<input checked="" type="checkbox"/> Plastic
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 1 gal		5. Location of Label Directions <input checked="" type="checkbox"/> On labeling accompanying product	
6. Manner in Which Label is Affixed to Product			<input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled	<input checked="" type="checkbox"/> Other Self-adhesive	

### Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Premjit Halarnkar (premjit.halarnkar@cpsagu.com)	Title Registration Manager	Telephone No. (Include Area Code) 970-685-3579
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto 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 Registration Manager	
4. Typed Name Premjit Halarnkar, Ph.D., MPA	5. Date May 20, 2011	





# Radiate®

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Reduces transplant shock and promotes plant growth

<b>ACTIVE INGREDIENTS:</b>		<b>By wt</b>
3-Indolebutyric acid (IBA) .....		0.85%
Cytokinin, as Kinetin .....		0.15%
<b>OTHER INGREDIENTS:</b> .....		<b>99.00%</b>
	<b>TOTAL</b>	<b>100.00%</b>

## KEEP OUT OF REACH OF CHILDREN CAUTION

### FIRST AID

- 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL 1-866-944-8565.**

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet.

### ENVIRONMENTAL HAZARDS

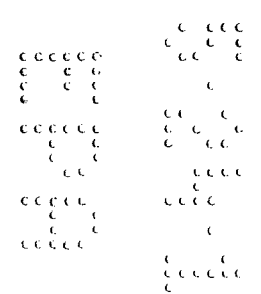
Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

### NOTIFICATION

Date Reviewed: JUN 22 2011 EPA REG. NO. 34704-909

Reviewed By: J. Fournier, BPPD EPA EST. NO. 72639-CA-001

NET CONTENTS 1 U.S. GAL. (3.785 L)



031710 V2D 05G11

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**RADIATE®**  
**EPA REG. NO. 34704-909**

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

**Applicators and other handlers must wear:**

- Long sleeved shirt and long pants
- Chemical resistant gloves Category A, such as butyl rubber ≥ 14 mils, or natural rubber ≥ 14 mils, or neoprene rubber ≥ 14 mils or nitrile rubber ≥ 14 mils and shoes plus socks.

Follow the 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.

**PHYSICAL OR CHEMICAL HAZARDS**

Combustible. Do not use or store near heat or open flame.  
For chemical spill, leak, fire or exposure, call CHEM-TREC at 1-800-424-9300.

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

**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 applications. For any requirements specific to your State or Tribe, consult the State or Tribal 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 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 4 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
- Chemical resistant gloves Category A, such as butyl rubber ≥ 14 mils, or natural rubber ≥ 14 mils, or neoprene rubber ≥ 14 mils or nitrile rubber ≥ 14 mils
- Shoes plus socks

**GENERAL INFORMATION**

Radiate® contains two (2) different plant growth regulators (PGRs) that synergistically stimulate early and improved root development. In addition, Radiate contains a mixture of vitamins that aid in successful transplanting and plant growth.

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**RADIATE®**  
**EPA REG. NO. 34704-909**

When using a non-ionic surfactant, Loveland Products, Inc. recommends LI 700® at 0.25% to 0.5% v/v.

**USE DIRECTIONS FOR CHEMIGATION**

Apply Radiate through fixed or standing irrigation systems or through foliar applications. Foliar applications are preferred. Apply this product only through the following types of irrigation systems:

1. Sprinkler including big gun, solid set or hand move irrigation systems.
2. Calibrated overhead watering booms.
3. Drip (or micro sprinkler) irrigation systems.

Before applying this product through any type of irrigation system, perform a small-scale trial to determine if product performance and phytotoxicity results are acceptable.

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

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

Do not connect an irrigation system (including greenhouse systems), used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person shall shut the system down and make necessary adjustments should the need arise.

**CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS**

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 out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

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 pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

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**EPA REG. NO. 34704-909**

Agitate the pesticide supply tank throughout the application of Radiate. Except for turfgrass, apply Radiate at the rate of 20 fl. oz. per acre at the end of the irrigation period in a sufficient amount of water to allow proper coverage of plant or crop. Fill the supply tank one-half full with water, add the appropriate amount of Radiate to the tank and finish filling the tank with water.

**DRIP/TRICKLE OR SPRINKLER CHEMIGATION**

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. 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 pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment. (This statement only applies to sprinkler chemigation.)

Agitate the pesticide supply tank throughout the application of Radiate. Except for turfgrass, apply Radiate at the rate of 20 fl. oz. per acre at the end of the irrigation period in a sufficient amount of water to allow proper coverage of plant or crop.

Fill the supply tank one-half full with water, add the appropriate amount of Radiate to the tank and finish filling the tank with water.

**SUGGESTED MINIMUM SPRAY VOLUME (GALLONS) PER ACRE WHEN APPLYING Radiate**

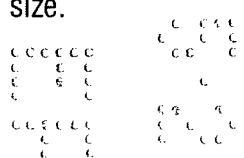
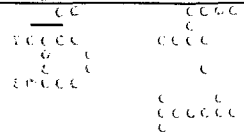
Crop	Ground		Air
	Dilute	Concentrate	
Vegetables, Field crops	15	—	5
Small fruits, Vines, Miscellaneous	150	50	15
Tree crops	400	50	20
Citrus	800	100	20

Depending upon the equipment used, and the specific crop, the spray volume applied per acre will differ. **Special considerations:** Radiate compatibility with other agricultural products has not been fully investigated. Compatibility of Radiate with other products requires testing for crop safety and performance prior to large-scale use. Products mixed with Radiate must be acidic (pH less than 7). Do not mix Radiate with any product(s) having a pH greater than 7. Repeat application may be necessary if it rains within 2 hours after application.

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Depending upon the equipment used and specific crop, spray volume applied per acre will differ. Apply sufficient water volume to ensure thorough coverage.

**APPLICATION INSTRUCTIONS TO REDUCE TRANSPLANT SHOCK AND PROMOTE NEW PLANT GROWTH**

<b>Crop</b>	<b>Amount of Radiate (fl. oz.)</b>	<b>Application Timing</b>	<b>Remarks</b>
Alfalfa, Clover, Hay	2 fl. oz. per acre*	Seedling Alfalfa, Clover, Hay: apply at 2-4 trifoliate stage. Established crop: at green-up	Promotes new root development and growth.
Brassica Vegetables such as: Broccoli, Cauliflower, Cabbage & Mustard Greens	Drench application in transplant water at 1.3 fl. oz. per 10 gals. water.	1st: At time of transplant. 2nd: 10-14 days after first application.	Foliar application: Apply to achieve full coverage; use a non-ionic surfactant for hard to wet crops such as cabbage.
	Foliar application: 2 fl. oz. per acre*	1st: At 2-4 true leaf stage. 2nd: 10-14 days after first application.	
Canola (Oil)	2 fl. oz. per acre*	1st: At 2-4 leaf stage.	Tank mix with glyphosate products registered for use on Roundup Ready® canola.
Citrus Fruits such as: Sweet orange, Lemon and Grapefruit	13 fl. oz. in 100 gals. water	Apply when fruit are 5 mm in size. Make additional applications if needed.	Thoroughly apply spray.
Corn (Sweet, Field and Popcorn)	2 fl. oz. per acre*	At 2-6 leaf stage.	Tank mix with glyphosate products registered for use on Roundup Ready corn.
Cotton	2 fl. oz. per acre*	1st: At 2-4 true leaf stage 2nd: 10-14 days after first application.	Can be tank mixed with glyphosate products registered for use on Roundup Ready cotton.
Cucurbit Vegetables such as: Cucumber, Muskmelon, Cantaloupe, Summer squash, Watermelon and Honeydew	2 fl. oz. per acre*	1st: If seeded, apply at 2-4 true leaf stage. 2nd: 10-14 days after first application.	Enhances root growth.
Fruiting Vegetables such as: Tomato, Pepper and Eggplant	2 fl. oz. per acre*	1st: At 2-4 true leaf stage. 2nd: 10-14 days later.	—
Grape	4-6 fl. oz. in 100 gals. water	1st: Apply when grapes are 2-3 mm in size. 2nd: 10-14 days after first application. 3rd: 45 days prior to harvest. 4th: 30 days prior to harvest.	Increases potential to enhance berry size.  
Leafy Vegetables such as: Celery, Head lettuce, Leaf lettuce and Spinach	2 fl. oz. per acre*	1st: At 2-4 true leaf stage. 2nd: 10-14 days after first application.	

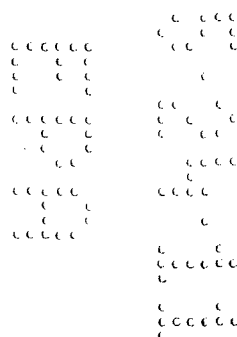


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<b>Crop</b>	<b>Amount of Radiate (fl. oz.)</b>	<b>Application Timing</b>	<b>Remarks</b>
Legume Vegetables (Succulent or dry) such as: Soybean, Peas, all types of beans	2 fl. oz. per acre*	At 2-4 trifoliolate leaf stage.	Can be tank mixed with glyphosate products registered for use on Roundup Ready soybeans.
Peanut	2 fl. oz. per acre*	1st: At 2-4 true leaf stage. 2nd: 10-14 days after first application.	—
Tuber Vegetables such as: Potato, Sweet potato, Yam	2 fl. oz. per acre*	1st: At 2-4 true leaf stage. 2nd: 10-14 days after first application.	Foliar applications: apply thoroughly until dripping.
Root Vegetables such as: Carrot, Radish, Turnip, Ginseng, Horseradish, Parsley (turnip-rooted) and Sugar beet	2 fl. oz. per acre*	1st: At 2-4 true leaf stage. 2nd: 10-14 days after first application.	Foliar application: thorough spray coverage is necessary.
Pome/Stone Fruits such as: Apple, Apricot, Cherry, Plum, Plumcot and Peach	13 fl. oz. in 100 gals. water	Apply when fruit are 5 mm in size. Make additional applications if needed.	—
Rice	2 fl. oz. per acre*	1st: At 4-5 leaf stage.	—
Strawberry	1.3 fl. oz. in 10 gals. water	1st: Spray immediately after transplant. 2nd: 10-14 days after first application.	—
Soybeans	2 fl. oz. per acre*	At 2-5 trifoliolate leaf stage.	Tank mix with glyphosate products registered for use on Roundup Ready soybeans.
Sorghum	2 fl. oz. per acre*	At 2-6 leaf stage.	—
Wheat	2 fl. oz. per acre*	1st: At 2-4 leaf stage.	—

\*If application spray volume is greater than 15 gals. per acre, use the dilution rate of 13 fl. oz. per 100 gals. water.



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**TURFGRASS**

**For Sod Grass:** Apply Radiate by ground using 20-40 gals. of water per acre. Use 2.5 fl. oz. to 6.5 fl. oz. product in 20 gals. to 40 gals. of water, respectively, at a 1:1000 dilution rate.

**For Turfgrass:** Apply Radiate by ground according to the table below using 1-10 gals. of water per 1000 sq. ft. Use Radiate for turf growth suppression at the dilution rate of 1: 300 (4.2 fl. oz. product per 10 gals. water).

<b>Turf</b>	<b>Amount (Radiate/gals water/1000 sq ft*)</b>	<b>How and when to apply</b>
<b>Warm Climate grasses</b> such as: St. Augustine, Bermuda, Bermuda hybrids, Centipede & similar warm season grasses	0.13 – 0.65 fl.oz./1-5 gals. of water/1000 sq. ft.	Make applications at 2-week intervals during the growing season.
Dichondra	0.65 – 1.3 fl.oz./5-10 gals. of water/1000 sq. ft.	Make applications at 2-week intervals during the growing season.
<b>Cool Climate grasses</b> such as: Bluegrass, Rye, Fescue, and similar cool season grasses	0.13 – 0.65 fl.oz./1-5 gals. of water/1000 sq. ft.	Make applications at 2-week intervals during the growing season.

\*Apply 0.13 fl. oz. per gal.

**ORNAMENTALS**

**Greenhouse and nursery grown ornamentals**

Differences in responsiveness may vary from one cultivar to another or from one set of growing conditions to another. Unless previous experience dictates otherwise, prior to widespread use, test a small number of plants from each cultivar to verify desired efficacy.

**Foliage Plants:**

- |            |               |              |                        |
|------------|---------------|--------------|------------------------|
| Aglaonema  | Dieffenbachia | Maranta      | Schefflera             |
| Ajuga      | Dracaena      | Palms        | Schlumbergera          |
| Anthurium  | Ficus         | Peperomia    | Spathiphyllum          |
| Aphelandra | Fittonia      | Philodendron | Syngonium              |
| Caladium   | Gynura        | Pilea        | Tradescantia           |
| Cissus     | Hoya          | Pothos       | Similar foliage plants |

**Bedding and Flowering Plants:**

- |               |            |            |                |
|---------------|------------|------------|----------------|
| Abutilon      | Cyclamen   | Impatiens  | Portulaca      |
| Aglais        | Dahlia     | Iris       | Roses          |
| Alyssum       | Delphinium | Jasminum   | Salvia         |
| Calceolaria   | Dianthus   | Lily       | Scabiosa       |
| Canna         | Foxglove   | Lupine     | Sedum          |
| Carnation     | Fuchsia    | Marigold   | Sempervivum    |
| Champaca      | Gardenia   | Michelia   | Tulips         |
| Chrysanthemum | Gazania    | Monarda    | Viola          |
| Cineraria     | Geranium   | Osmachus   | Zinnia         |
| Columbine     | Gladiolus  | Petunia    | Similar plants |
| Coral Bells   | Gloxinia   | Poinsettia |                |

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**Woody Ornamentals:**

Arborvitae	Carissa	Juniper	Rhododendron
Aucuba	Chinese magnolia	Maple	Viburnum
Azalea	English Ivy	Pine	Similar plants
Boxwood	Holly	Podocarpus	

**Garden Grown Tree Fruits:**

Apple	Guava	Litchi	Persimmon
Asian pear	Grape	Longara	Plum
Apricot	Jujubee	Mango	Prunes
Cherry	Kumquat	Orange	Starfruit
Fig	Lemon	Peach	Similar plants

**Application Rates and Timing:**

Dilute 0.85 fl. oz. of Radiate in 10 gals. of water (1:1500 dilution rate) for plants less than 2 years old. Dilute 1.3 fl. oz. Radiate in 10 gals. of water (1:1000 dilution rate) for mature plants. Repeat applications at 10-14 day intervals when required. Apply the last spray 1-2 weeks prior to sale. Uniform and thorough spray coverage is necessary for best results.

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**CUTTINGS**

**Dilution rate:**

**For softwood cuttings use a 1:20 dilution rate** (0.5 fl. oz. product in 10 fl. oz. of water); **For medium wood cuttings use a 1:10 dilution rate** (1 fl. oz. product in 10 fl. oz. of water); **For hard wood cuttings use a 1:5 dilution rate** (2 fl. oz. product in 10 fl. oz. water).

Radiate: Use on **all nursery stock cuttings** including **Woody ornamentals, Deciduous hardwoods, Evergreens, Ground Covers, and Perennials** such as: African violet, Arborvitae, Azalea, Aster, Barberry, Begonia, Boxwood, Camellia, Grape-myrtle, Clematis, Chrysanthemum, Cypress, Dahlia, Delphinium, Dogwood, Euonymus, Forsythia, Fuchsia, Geranium, Heather, Hibiscus, Holly, Honeysuckle, Ivy, Japanese quince, Jasmine, Juniper, Lilac, Magnolia, Minor, Myrtle, Pachysandra, Photinia, Pivet, Pyracantha (Firethorn), Rhododendron, Rose, Spirea, Yew, Viburnum, Vinca, Wriggle and many others.

Obtain cuttings from vigorous, healthy plants and keep cuttings moist and cool such as in an ice chest. With a sharp knife, trim the cutting (2-8 inches long) with a diagonal cut just below a node or leaf. Dip the basal end of cutting, individually or in bunches, into the Radiate solution for **3-5 seconds**.

Following dipping, place cuttings into planting medium. Depending on the species, rooting will take place in several weeks or months under a moist greenhouse environment. Transplanting may be performed once the cuttings have rooted.

**TO REDUCE TRANSPLANT SHOCK AND PROMOTE NEW ROOT GROWTH- For Shrubs, Flowers, Groundcovers & Houseplants**

**Rose, Arborvitae, Gardenias, flowering trees and other ornamentals in bare root transplant or from containers:** Use 2 tablespoons of Radiate per 10 gals. of water. Apply solution to root area in transplanting hole and then cover roots with soil. After planting, repeat applications biweekly as a drench to thoroughly wet the root area using a solution consisting of one tablespoon of Radiate per 10 gals. of water.

**Annual and perennial flowers (bedding plants):** Use 1 tablespoon of Radiate per 10 gals. of water and apply to thoroughly saturate roots at time of planting. Repeat at weekly intervals until plants are well established.

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**Groundcovers such as, Ivy, Iceplant, Geranium, Cotoneaster, Barberry, & Ajuga:** Use 1 tablespoon of Radiate per 10 gals. of water and apply thoroughly to saturate the root area at time of planting. Repeat at weekly intervals until plants are well established.

**Houseplants (repotting and planting):** Use 1 tablespoon of Radiate per 10 gals. of water and water thoroughly at weekly intervals to saturate the root zone until plants are well established.

**Established plants:** To continue new root growth, use 1 tablespoon of Radiate per 10 gals. of water and water plants with solution once a month.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** RADIATE should be stored in its original container in a cool, dry locked place out of the reach of children and out of direct sunlight.

**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: Nonrefillable container.** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at [www.acrecycle.org](http://www.acrecycle.org). If not recycled, then 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.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

**For packages up to 5 gallons: 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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**For chemical spill, leak, fire or exposure, call CHEM-TREC at 1-800-424-9300.**

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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