

## D9 06 2011

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Fine Agrochemicals, LTD c/o Frederick T. Smith SciReg, Inc. 12733 Director's Loop Woodbridge, VA 22192

SEP 0 6 2011

Subject:

Piccolo

EPA Reg No. 62097-11 Decision No. 453138

Submission date: July 28, 2011

Application for Pesticide Notification (PRN 98-10)

#### Dear Mr. Smith:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The Agency acknowledges the addition of the optional first aid referral statement and the text revisions under the "Dry Liner Recommendations" section on page 5.

The label submitted with the application has been stamped "Notification" and will be placed in our records. If you have questions concerning this letter, please contact Dominic Schuler at (703) 347-0260 or via email at schuler.dominic@epa.gov.

Tony Kish

Product Manager 22

Fungicide Branch

Registration Division (7504P)

Form Approved. OMB No. 2070-0060. Approval expires 2-28-95

0	gran	1	79
100	Brune	g.u.e.	LA
10	See.	H #	7

**United States** 

	Registration
	Amendment
X	Other

**OPP Identifier Number** 

A Property of the	Environmental Protection Agency Washington, DC 20460		Amendment Other	
	Application for P	esticide - Section	on I	
Company/Product Number     62097-11		EPA Product Manage     T. Kish		oposed Classification  None Restricted
4. Company/Product (Name)		PM#	L	None Restricted
Piccolo	anda)	22	Iii	FDA 0+: 0(-)(0)
5. Name and Address of Applicant (Include ZIP C Fine Agrochemicals Ltd. Hill End House Whittington, Worcester WR5 2RQ UK	ode)		N. In accordance with FI imilar or identical in com NOTIFICA SEP 0 6 2	nposition and labeling
Check if this is a new address				
	Sect	ion - II		
Amendment - Explain below.  Resubmission in response to Agency letter	dated	Agency letter da	eation.	CCCC
X Notification - Explain below.		Other - Explain	below.	0000
Explanation: Use additional page(s) if necessal Addition of First Aid referral statement to from This notification is consistent with the provisions of labeling or the confidential statement of formula of EPA. I further understand that if this notification is FIFRA and I may be subject to enforcement action.	of PR Notice 98-10 and EPA of this product. I understand the not consistent with the terms	regulations at 40 CFR 15: nat it is a violation of 18 Us of PR Notice 98-10 and	.S.C. Sec. 1001 to willfully	make any false statement to
	Secti	on - III		000000
Material This Product Will Be Packaged In:				0 0
Child-Resistant Packaging Unit Packaging	Mator S	foluble Packaging	2. Type of Container	ceeeec
Office Resistant Fackaging	vvaler s	loluble i ackaging		
Yes Yes Yes (2.5 gal		Yes	Metal	
	only)		Plastic Glass	
Yes Yes (2.5 gal No No If "Yes"	only)  No. Per If "Yes"	Yes No No. Per	Plastic Glass Paper	ecify)
Yes No Yes (2.5 gal	only)	Yes No No. Per	Plastic Glass	ecify)
Yes Yes   Yes (2.5 gal No   No   If "Yes" Unit Packaging wat.	only)  No. Per If "Yes"	Yes No No. Per Container	Plastic Glass Paper	
Yes Yes Yes (2.5 gal No  * Certification must be submitted  3. Location of Net Contents Information	No. Per If "Yes" Container Package	Yes No No. Per Container	Plastic Glass Paper Other (Spe	
Yes No  * Certification must be submitted  3. Location of Net Contents Information Label Container	No. Per Container If "Yes" Package  4. Size(s) Retail Container  Lithograph Paper glued Stenciled	Yes No No. Per Container  5. Lo Other	Plastic Glass Paper Other (Spe	
Yes No  * Certification must be submitted  3. Location of Net Contents Information Label Container	No. Per Container If "Yes" Package  4. Size(s) Retail Container  Lithograph Paper glued Stenciled  Secti	Yes No No. Per Container  5. Lo Other	Plastic Glass Paper Other (Spe	product.
Yes No  * Certification must be submitted  3. Location of Net Contents Information Label Container  6. Manner in Which Label is Affixed to Product	No. Per Container If "Yes" Package  4. Size(s) Retail Container  Lithograph Paper glued Stenciled  Secti	Yes No No. Per Container  5. Lo Other	Plastic Glass Paper Other (Spe	product.
Yes No  * Certification must be submitted  3. Location of Net Contents Information Label Container  6. Manner in Which Label is Affixed to Product  1. Contact Point (Complete items directly below	No. Per Container If "Yes" Package  4. Size(s) Retail Container  Lithograph Paper glued Stenciled  Section identification of individual  Title Agent	Yes No No. Per Container  5. Lo Other	Plastic Glass Paper Other (Spe	product.  ation.)  No. (Include Area Code)
Yes No  * Certification must be submitted  3. Location of Net Contents Information Label Container  6. Manner in Which Label is Affixed to Product  1. Contact Point (Complete items directly below Name Frederick T. Smith  I certify that the statements which I have made I acknowledge that any knowingly false or misle both under applicable law.  2. Signature	No. Per Container If "Yes" Package  4. Size(s) Retail Container  Lithograph Paper glued Stenciled  Sectifor identification of individual  Title Agent  Certification on this form and all attachmed adding statement may be puned.	Yes No No. Per Container  5. Lo Other  On - IV to be contacted, if necess ents thereto are true, accurate ishable by fine or impriso	Plastic Glass Paper Other (Spe	product.  ation.)  No. (Include Area Code)
Yes No  * Certification must be submitted  3. Location of Net Contents Information Label Container  6. Manner in Which Label is Affixed to Product  1. Contact Point (Complete items directly below Name Frederick T. Smith  I certify that the statements which I have made I acknowledge that any knowingly false or misle both under applicable law.	No. Per Container If "Yes" Package  4. Size(s) Retail Container  Lithograph Paper glued Stenciled  Sectifor identification of individual  Title Agent  Certification on this form and all attachmed adding statement may be puned.	Yes No No. Per Container  5. Lo Other  On - IV to be contacted, if necess ents thereto are true, accurate.	Plastic Glass Paper Other (Spe	product.  ation.)  No. (Include Area Code) 500  6. Date Application Received

# SciReg, Inc. Science and Regulatory Consultants

July 28, 2011

Mr. Tony Kish
Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

Re: Piccolo

- EPA Reg. No. 62097-11
- Notification Consistent with PR Notice 98-10

Dear Mr. Kish:

On behalf of Fine Agrochemicals Ltd. (Fine), SciReg, Inc. is submitting two copies of a revised label for Piccolo (EPA Reg. No. 62097-11), one of which is redlined to show the changes. The only changes are:

- 1. Incorporation of the optional First Aid referral statement on the front label, "See inside panel for First Aid Statements," and
- 2. Revision of the text under the Dry Liner Recommendations section on page 5 to be directive. Changed from "At the time of Piccolo application, media can be moderately dry..." to "At the time of Piccolo application, ensure media is moderately dry..."

If you have any questions, please let me know.

Frederick T. Smith

Sincerely

Senior Regulatory Specialist

Enclosures

## **PICCOLO**

Ornamental Plant Growth Regulator

Active Ingredient: Paclobutrazol (( $\pm$ )-(R\*,R\*)-ß-[(4-Chlorophenyl)methyl)- $\alpha$ -(1,1-dimethylethyl)-I<u>H</u>-1,2,4-triazole-1-ethanol): 00.4%

Other Ingredients:

99.6%

Total:

100.0%

PICCOLO contains 0.12 g active ingredient per fluid ounce (4000 ppm)

#### KEEP OUT OF REACH OF CHILDREN

### **CAUTION**

[See inside panel for First Aid Statements.]

NOTIFICATION SEP 0 6 2011

EPA Reg. No. 62097-11

EPA Est. No:

**NET CONTENTS:** 1 gallon

FIRST AID				
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.				

FOR CHEMICAL EMERGENCY: spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300

#### PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION. Harmful if absorbed through skin. Avoid contact with skin or clothing.

IMPORTANT: Read the entire directions for use and the conditions of sâle and warranty before using this product.

#### 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 C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves made of any waterproof material, such as Barrier Laminate, Butyl rubber, Nitrile Rubber, Neoprene Rubber, Polyvinyl Chloride, or Viton.
- Shoes plus socks

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.

#### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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.

#### **ENVIRONMENTAL HAZARDS**

Do not contaminate water when disposing of equipment washwaters.

#### **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 person, 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.

Read all label directions carefully before use.

#### 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 Standards of the statements of the worker Protection Standards of the statements of the worker Protection Standards of the worker Prot

Do not enter or allow worker entry into treated areas during the restricted restricted (REI) of 12 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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material, such as Barrier Laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Polyvinyl Chloride, or Viton.
- Shoes plus socks

#### **GENERAL INFORMATION**

- PICCOLO is a plant growth regulator for use on commercially grown ornamental plants grown in containers in nurseries, greenhouses etc.
- PICCOLO reduces internode elongation, resulting in more desirable compact plants.
- PICCOLO produces no phytotoxic effects when used as directed.
- PICCOLO can be applied by spray, drench or bulb soak.
- PICCOLO may be applied at any time of the day without risk of phytotoxic effects.
- Under certain conditions, PICCOLO may be most effective when applied in sequential applications.
- Consistently agitate the spray/drenching solution of PICCOLO to ensure uniform distribution during application.
- PICCOLO does not require the addition of wetting agents.
- PICCOLO is an extremely effective compound. DO NOT REUSE POTS, TRAYS, OR OTHER CONTAINERS THAT PREVIOUSLY HELD PLANTS OR SOIL TREATED WITH PICCOLO.
- The efficacy of PICCOLO is affected by environmental and cultural conditions.
   Conditions causing vigorous growth require higher rates of PICCOLO to achieve the desired effect. Temperature is particularly important in this respect.
- Response to PICCOLO treatments varies with species and variety.

#### MIXING INSTRUCTIONS

Half fill the spray/drenching tank with clean water. Accurately measure out the required amount of PICCOLO according to Table 1. Add the PICCOLO to the spray tank and fill the tank with the remaining required amount of water to achieve the correct concentration.

Table 1 - PICCOLO DILUTION TABLE

ppm PICCOLO desired	fl. oz. per gallon	ml/cc per gallon
1	0.032	1.0
2	0.064	1.9
3	0.096	2.8
4	0.13	3.8
5	0.16	4.7
10	0.32	9,50000
20	0.64	19.0 ° ; ° ;
25	0.8	24.0 , ,
30	1.0	28.00
40	1.3	38:00
50	1.6	47.0 مُرْدِيْدُ
100	3.2	95.0
200	6.4	190.0

#### **APPLICATION TECHNIQUES**

#### 1. SPRAY APPLICATIONS

When applying PICCOLO by spray, it is important that:

- Spray application must only be performed in enclosed areas, such as greenhouses, where spray drift outside the treated area cannot occur.
- Sufficient volume is used to thoroughly wet plant stems.
- Excessive spray solution is not applied as PICCOLO is active through both root and stem uptake.
- Uniform coverage of all plants is achieved.
- A period of 30 minutes is allowed after application before overhead irrigation or rain occurs.
- Maximum application rates must never be exceeded.

Sequential applications using 50-100% of the lowest application rate can provide more uniform growth effects and also guard against overdosing. This is particularly true when cooler temperatures or lower light conditions occur.

Generally the spray volume for small plants in small containers or plug trays which are closely spaced is 1-2 qts./100 sq. ft. of bench space. For larger plants with a well developed canopy, the spray volume is approximately 3 qts./100 sq. ft. of bench space.

#### 2. DRENCH APPLICATIONS

Drench applications of PICCOLO tend to be the most effective in reducing plant height and producing a uniform effect. Drench applications can be made, without phytotoxic effects, late in the growing cycle, at or near the point that marketable size is reached.

When applying PICCOLO by drench, it is important that:

- Applications are made to moist potting media.
- Uniform distribution of drench is achieved.
- No more than 10% run through of solution occurs.
- Regard is paid to the growing media. Media containing bark or of high organic content may require the use of higher application rates.
- When applied as a drench through sub-irrigation in saucers or benches etc. reduce rates by 25-50%.
- When continuously applied through irrigation water reduce the rate used to 5-25% of a single conventional drench application.
- Maximum application rates must never be exceeded.

Table 2 provides a guide to determining the appropriate drench volume needed for the specified pot sizes based on the capacity of a 6 inch 'Azalea' type pot. Individual pots vary in style and depth and thus capacity. Growers must determine the appropriate concentration and volume of drench to apply according to the pot volume, media and species/variety of plant considered.

Table 2 - DRENCH VOLUME GUIDELINES

Pot Diameter	Drench Volume				
(inches)	(fl. oz./pot)	n	ng of paclob	utrazol/pot	t
		1 ppm	2 ppm	3 ppm	4 ppm
4	2	0.063	0.125	0.188	0.250
5	3	0.094	0.188	0.282	0.375
· 6	4	0.125	0.250	0.375	0.500
8	10	0.313	0.625	0.938	1.25
10	25	0.783	1.56	2.35	3.125
10" hanging basket	15	0.470	0.939	1.41	1.878
12	40	1.25	2.50	3.75	5.00

#### 3. PREPLANT BULB SOAKS

Bulb soak applications of PICCOLO are extremely effective but rates and soaking times need to be adjusted according to species.

#### 4. APPLICATION INSTRUCTIONS FOR PRE-TRANSPLANT LINER DIP APPLICATION ON PLUGS OR ROOTED CUTTINGS OF BEDDING PLANTS AND HERBACEOUS FLOWERING/FOLIAGE PLANTS

Applying PICCOLO by liner dip involves dipping the roots and media of seedling plugs or rooted cuttings in a treated solution prior to transplanting into the final container. Pretransplant liner dip applications of PICCOLO can be effective in reducing the height of very vigorous plants that tend to grow rapidly, following transplant. Liner dip applications also allow the use of variable PICCOLO rates within single mixed-plant containers, thereby providing greater plant growth uniformity.

Moisture level of the media at the time of liner dip treatment will influence the degree of PICCOLO absorption, and thusly its availability to the roots. Under dry liner conditions, PICCOLO absorption will increase, therefore requiring a lower use rate. Media that is moist at the time of PICCOLO application will absorb less treated solution and will elicit a lesser treatment response.

<u>Dry Liner Recommendations:</u> At the time of PICCOLO application, ensure media is moderately dry, but prior to plant wilting. Before treatment, allow liners to dry down following irrigation. Because dry liners will absorb more PICCOLO-treated solution than wet liners, lower use rates are recommended. The length of time the liner remains in the PICCOLO-treated solution may also affect the degree of size control achieved. For dry liners, use a dip time ranging from 30 seconds to 2 minutes.

<u>Wet Liner Recommendations:</u> Irrigate liners 30 minutes to 2 hours, insuring that soil moisture is uniform, prior to treating with PICCOLO. Because wet liners will absorb significantly less PICCOLO-treated solution than dry liners, higher treatment rates are required. Although length of dip time is not as critical when treating wet liners, soak wet liners in PICCOLO-treated solution for 5 to 10 minutes.

#### **General Recommendations**

**Root Development:** The degree of root development at the time of treatment can affect the plant's response to PICCOLO. Poorly rooted or immature cuttings can be excessively stunted. Therefore, treat only well rooted cuttings with liner dip applications of PICCOLO.

**Solution Depth:** The depth of treated solution may affect the activity level of a PICCOLO liner dip treatment. Since the majority of roots are located at the lower one-half of the plug, a solution depth covering at least 50% of the liner cell is recommended.

**Treatment Timing:** The length of time from treatment to transplanting will have a minimal impact on PICCOLO activity, allowing for good flexibility. Times ranging between 2 hours to 10 days with liner dip treatments have been shown to provide equally effective results.

**Use Rates:** Due to the number of factors that can result in treatment variability; including: soil moisture, light level, growing conditions, plant cultivar, root development and desired degree of growth control, optimum PICCOLO rates will vary. The key to ensuring consistency in results is to develop a practical system to standardize as many factors as possible, including: media moisture level, duration of dip, age of cuttings and length of time between treatment and transplant. Conduct initial trials using the rates in Table 3.

Table 3 - Trial Rates (ppm)

Desired Level of Activity	Southern Climates	Northern Climates
Low	2-6	0.5-4
Medium	6-8	4-6
High	8-10	6-8

- 1. Do not reuse plug flats for PICCOLO-sensitive crops (e.g., begonia, vinca, pansy) without adequate washing.
- 2. Avoid liner dips for any crop in which the spread of root-borne disease is possible.

#### **DETERMINING OPTIMUM RATES**

Optimum PICCOLO rates will vary between growers and will depend on the desired final plant height, growing conditions, applications techniques, species, and variety or cultivar. Conduct trials with small numbers of plants using the recommended rates to determine the optimum rates before PICCOLO is applied to a large number of plants. Growers may find they have to adjust application rates, techniques, timings and treatment periods to achieve their desired effect.

- The rates on this label are rate ranges and must only be used as guidelines.
- Always start trials at the lowest rate and work up as required.
- Do not exceed the maximum rate.

For plant species not specifically listed on the label, run initial trials using the rates specified in Table 4.

Table 4 - TRIAL RATES (ppm) BY GENERAL PLANT TYPE \*

Plant Type	Spray	Drench	Bulb Soak
Bedding Plants	30	1	N/A
Bedding Plant Plugs	5	NR	N/A
Flowering/Foliage Plants (annual or perennial)			
- Herbaceous Species	30	1	N/A
- Woody Species	50	2	N/A
Woody Landscape Plants	100	4	N/A
Bulb Crops	100	10	20 (@ 15 min.)

NR = use is not recommended N/A - use is not applicable

#### **USE AND RATE BY CROP**

BE SURE YOU HAVE READ, UNDERSTOOD AND ACTED UPON THE RECOMMENDATIONS OF THE SECTION 'DETERMINING OPTIMUM RATES' BEFORE APPLYING PICCOLO TO A LARGE NUMBER OF PLANTS.

#### A. FLORIST AZALEAS

Apply PICCOLO as a spray or drench to azaleas.

Use concentrations of 100 - 200 ppm for spray applications and 5 - 15 ppm for drenches.

Make applications to control plant height and promote flower bud initiation when new growth after final pruning is 1.5 – 2 inches long.

Make applications to reduce bypass shoot development after bud set when bypass shoots are barely visible, or about 5 to 7 weeks prior to cooling.

#### B. BEDDING PLANTS

Spray bedding plants with PICCOLO. Use rates are:

Plant	Rate Range	Plant	Rate Range
	(ppm)		(ppm)
Ageratum	15 – 45	Marigold (African)*	30 - 60
Alyssum	40 – 60	Marigold (French)	15 - 30
Celosia	15 – 45	Pansy	5 - 15
Coleus	15 – 30	Petunia	15 - 45
Dahlia	15 – 45	Salvia	20 - 60
Dianthus	20 – 60	Snapdragon *	30 - 90
Impatiens (standard)	10 – 45	Verbena	15 - 30
Impatiens (New Guinea)	2.5 – 15	Zinnia	15 - 45

<sup>\*</sup> These trial rates are based on use in the Sunbelt Region. Run initial tests using 0.5 X the rates listed in regions north of the Sunbelt.

- \* Apply at an early stage of plant growth with good stem coverage, especially for vigorous varieties.
- PICCOLO may cause spotting of foliage on annual Vinca (periwinkle). DO NOT USE.
- Do not use on fibrous begonias as they are very sensitive to PICCOLO.
- High rates of PICCOLO may delay flowering, especially of impatiens and petunia.
- Late applications and overdosing may cause slow growth on transplantation. This
  can be avoided by using multiple applications of 25 50% of the specified rate and
  monitoring plant growth.

For bedding plants not listed above, start with a rate of 30 ppm in the Sunbelt Region and 15 ppm in the Northern Belt Region to determine optimum rates. Start applications when new growth reaches 2 inches or when plants reach marketable size.

#### C. BEDDING PLANT PLUGS

Spray bedding plant plugs with PICCOLO. Use rates are:

Plant	Rate Range	Plant	Rate Range
	(ppm)		(ppm)
Ageratum	5 – 10	Marigold (African)	10 - 20
Alyssum	10 – 20	Marigold (French)	5 - 10
Celosia	5 – 10	Pansy	1 - 5
Coleus	5 – 10	Petunia	5 - 10
Dahlia	5 – 10	Salvia	5 - 10
Dianthus	10 – 20	Snapdragon	10 - 20
Impatiens (standard)	0.5 - 10	Verbena	5 - 10
Impatiens (New Guinea)	0.25 - 5	Zinnia	5 - 10

- Drench applications of PICCOLO are not recommended for bedding plant plugs.
- When assessing optimum rates, pay particular attention to how treated plants grow after transplanting to avoid overdosing.

For bedding plants not listed above, start with a rate of 5 ppm to determine optimum rates. Start applications when plants reach the 1-2 true leaf stage.

#### D. BULB CROPS

Apply PICCOLO by spray, drench or bulb soak. Spray applications of PICCOLO are the least desirable method for controlling plant height and must be applied sequentially to maximize uniformity of the crop. Begin applications when plants reach a height of 2 - 4 inches.

Drench and bulb soak applications of PICCOLO are very effective. For most bulb types, begin drench applications when plants reach a height of 1 - 2 inches. For bulbs which require a cold period, apply PICCOLO drenches 1 to 5 days after thermal treatment.

Use rates and soak timings are:

DI	Comments	D	Described Della Const.
Plant	Spray rate	Drench rate	Preplant Bulb Soak
	(ppm)	(ppm)	Rate (ppm) / Soak Time
Amaryllis	ND	200	100 / 1 hr
Caladium	100 - 200	2 -16	60 / 30 min
Calla Lily	ND	5 - 15	20 / 15 min
Daffodil	ND	20 - 40	80 / 1 hr
Dahlia	ND	10 - 40	> 40 / 20 min
Freesia	ND	2 - 4	100 - 300 / 1 hr
Hybrid Lily (Asiatic	200 - 500	4 - 30	5 - 30 / 15 min
Oriental, LA)			
Montbretia	ND	ND	20 - 30 / 15 min
Tulip	ND	5 - 40	2 - 5 / 1 hr

ND = Rates for this particular use have not been determined. For these applications and for species not listed, run initial trials as outlined in the section 'DETERMINING OPTIMUM RATES'.

#### E. POT CHRYSANTHEMUMS

Apply PICCOLO to pot chrysanthemums as a spray or drench.

Use concentrations of 50 - 200 ppm for spray applications and 1 – 4 ppm for drenches. Begin applications when axillary shoots are 2 to 3 inches long. Earlier applications can be made to vigorous varieties.

- When spraying, sequential applications of reduced rates tend to produce more uniformly shaped plants.
- If late treatment is required at disbud, minimal effect on flowering will occur if drench applications are used.
- Uniform application of both sprays and drenches is critical to uniform crop development.

#### F. UNLISTED FLOWERING & FOLIAGE PLANTS

Apply PICCOLO as a spray or drench to a wide variety of other flowering plants and foliage plants. Herbaceous species tend to require lower rates than woody species. For species not listed, run initial trials as outlined in the section 'DETERMINING OPTIMUM RATES'.

#### G. <u>GERANIUMS</u>

Apply PICCOLO as a spray or drench to geraniums.

Use concentrations of 10 - 30 ppm for spray applications. Begin applications for zonal geraniums when new growth is 1.5 - 2 inches long. Begin applications for seeded geraniums at 2 - 4 weeks after transplanting or when necessary.

- Geranium species are extremely sensitive to PICCOLO treatment. Growers must be cautious and conduct test trials before using drenches to apply PICCOLO.
- Early applications may require lower rates to avoid overdosing.
- PICCOLO will reduce late stretch when applied as the flower stems begin to elongate.

#### H. HIBISCUS

Apply PICCOLO as a spray or drench to Hibiscus.

Use concentrations of 30 - 150 ppm for spray applications.

Begin applications when lateral shoots are 1 to 4 inches long.

- Single applications will control growth for 3 to 6 weeks but sequential applications tend to produce more uniformly shaped plants.
- Apply PICCOLO 1 to 2 weeks prior to flowering to prevent late stretch.
- Conduct test trials as outlined in the section 'DETERMINING OPTIMUM RATES' before using drenches to apply PICCOLO.

#### I. PERENNIALS

Apply PICCOLO as a spray or drench to a wide variety of perennial plants.

Use rates are:

Plant	Spray Rate	Drench Rate
	(ppm)	(ppm)
Alcea rosea	30 - 50	1 - 2
Asclepias	30 - 60	ND
Chrysanthemum	50 - 200	1 - 4
Coreopsis	80 - 100	5 - 10
Delphinium	30 - 60	ND
Digitalis	80 - 160	2 - 4
Eupatorium	> 240	8 - 10
Gaura	> 30	30
Jacobinia (pink)	5 - 10	0.5 - 1
Monarda	60 - 160	> 4
Salvia	40 - 60	ND
Stokesia	40 - 80	ND
Verbena	120 - 160	> 3
Veronica	20 - 40	ND

#### > = Greater than

ND = Rates for this particular use have not been determined. For these applications and for species not listed, run initial trials as outlined in the section 'DETERMINING OPTIMUM RATES'.

#### J. POINSETTIAS

Apply PICCOLO as a spray or drench to Poinsettias.

Use concentrations of 10 - 30 ppm for spray applications in most regions but 15-45 ppm in southern Florida.

Begin applications to slower growing varieties in cool climates when axillary shoots are 2 to 3 inches long. For vigorous growing varieties in warm climates, begin applications when axillary shoots are 1.5 to 2 inches long. Sequential applications may be applied 1

14/17

to 3 times, applying approximately the same amount of PICCOLO in total as a single dose, at 7 to 14 day intervals, depending on plant vigor/growth.

Late sprayed applications of PICCOLO will reduce plant height but may reduce bract size. Do not apply PICCOLO after the initiation of short days. Generally, do not apply PICCOLO sprays after October 25 in Florida or after October 1 in other regions.

Use concentrations of 0.25 - 3 ppm for drench applications. (Based on 4 fl.oz./6 inch pot).

Make early production applications when axillary shoots are 1.5 to 3 inches long. Late drench applications can safely be made after initiation of short days to prevent late stretch minimal effect on bract size.

- Single applications at the higher rates are very effective but sequential applications tend to produce more uniformly shaped plants and also guard against overdosing.
- Optimum PICCOLO rates and timings will vary depending on the variety.

#### K. WOODY PLANTS

Apply PICCOLO as a spray or drench to woody plants.

Effective rates vary greatly with species. For all applications, run initial trials as outlined in the section 'DETERMINING OPTIMUM RATES'.

Recommended woody plants include:

Azalea	Euonymus	Juniper	Photinia
Bougainvillea	Hibiscus	Kalmia	Pine
Camellia	Hydrangea	Ligustrum	Rhododendron
Cotoneaster	llex (Holly)	Magnolia	Rose

#### **USE DIRECTIONS FOR CHEMIGATION**

In addition to the above use rates and recommendations, the following precautions must be observed when using this product in any type of irrigation system:

Apply this product only through the following systems:

- 1) Overhead sprinklers such as impact, or micro-sprinklers, or booms.
- 2) Microirrigation such as spaghetti-tube or drip emitters.
- 3) Mist-type irrigation such as fog systems.
- 4) Hand-held calibrated equipment such as the hand-held wand with injector.
- 5) Sub-irrigation, such as ebb and flow and flooded floor systems, or through individual saucers.

Do not apply this product using irrigation systems that may result in spray drift, such as micro-sprinklers or mist-type irrigation systems, except in enclosed areas, such as greenhouses, where spray drift outside the treated area cannot occur.

Do not apply this product through any other type of irrigation system. Crop injury or 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, contact your 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

#### 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.

Fill the supply tank with the desired amount of water. Then add the amount of PICCOLO required in order to achieve the final solution rate recommended for the specific crop to be treated. Agitate the mixture of PICCOLO and water frequently during the chemigation period to assure a uniform distribution throughout the system. Apply PICCOLO continuously for the duration of the water application but do not exceed recommended rates and volumes as outlined on the product label. For overhead applications to the foliage and stems, apply at a volume of 1 to 2 qts. per 100 sq. ft. for plugs and plants with small canopies. Volumes of 2 to 3 qts. per 100 sq. ft. may be necessary for plants with large canopies. For applications to the soil, apply at a volume of 4 fl. oz. per 6 inch pot.

#### 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 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 systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the 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.

16/17

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, or in cases where there is no water pump, when the water pressure decreases to the point where the 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.

#### STORAGE AND DISPOSAL

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

STORAGE: Keep container closed when not in use.

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

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. 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 ½ 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### WARRANTY DISCLAIMER AND LIMITATION OF LIABILITY

Fine Agrochemicals Limited ("FINE") warrants that this Product conforms to the specifications on this label. To the extent consistent with applicable law, FINE makes no other warranties and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for a particular purpose. No agent of FINE or any other person is authorized to make any representation or warranty beyond those contained herein.

It is impossible to eliminate all risks associated with this Product. Plant injury, lack of performance, or other unintended consequences may result because of factors such as abnormal weather conditions, use of the Product other than in strict accordance with this label's instructions, presence of other materials, the manner of application or other factors, all of which are beyond the control of FINE or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

To the extent consistent with applicable law: 1) FINE disclaims any liability whatsoever for special, incidental or consequential damages resulting from the handling or use of this Product and 2) FINE's liability under this label shall be limited to the amount of the purchase price or, at the election of FINE, the free replacement of the Product.

17/17

© Fine Agrochemicals Limited, Hill End House, Whittington, Worcester, WR5 2RQ United Kingdom.

PICCOLO is a registered trademark of Fine Agrochemicals Limited.

Fine Agrochemicals Limited Hill End House Whittington Worcester, WR5 2RQ United Kingdom