

BIATHLON®

Ornamental Herbicide



A GRANULAR HERBICIDE FOR PREEMERGENT CONTROL OF GRASS AND BROAD-LEAF WEEDS IN FIELD AND CONTAINER ORNAMENTALS, GROUNDS MAINTENANCE, AND OTHER SPECIFIED NON CROP AREAS. ALSO FOR EVERGREENS (BROADLEAF AND NEEDLE) LIMITED TO CHRISTMAS TREE FARMS AND CONIFER FARMS.



Product Information Bulletin

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GENERAL INFORMATION

Biathlon is a combination herbicide containing two selective active ingredients that provide a broad spectrum of weed control with very good plant tolerance on ornamentals.

Biathlon contains 2.0% oxyfluorfen and .75% prodiamine on a dust-free granule.

Common Name: Oxyfluorfen and Prodiamine

Class: Diphenylether + Dinitroaniline

GROUP

14 + 3

HERBICIDE

Packaging: 50 lbs. bags

RESTRICTED ENTRY INTERVAL (REI) AND SIGNAL WORD

REI = **24 hours**

Signal Word = **CAUTION**

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Long-sleeved shirt and pants
- Socks and shoes

MODE OF ACTION

Biathlon provides weed control by combining two modes of action, inhibition of both microtubule assembly (MOA #3) and inhibition of protoporphyrinogen oxidase (MOA #14). These MOA's result in the inhibition of cell division and disrupting cell wall formation in shoots and roots of emerging seedling weeds. The result is the prevention of weed seed emergence.

USE SITES

Biathlon is registered for use in field and container ornamentals, grounds maintenance and other specified crop areas. It is also labeled for use on evergreens (broadleaf and needle) but limited to Christmas tree and conifer farms.

APPLICATION AND RATES

Biathlon is applied as a broadcast application.

Container Grown Ornamentals

Apply 100 pounds per acre. Thoroughly incorporate granules into the media through watering-in. Apply **Biathlon** prior to weed seed germination. Prior to **Biathlon** application, irrigate with approximately ½ inch of water to firm potting media around newly planted root systems. **Biathlon** may be re-applied in 3 months. Do not apply over 200 pounds per acre per year. For application in the fall, apply two weeks prior to placing plants in an empty, enclosed greenhouse structure.

Field Grown Ornamentals, Christmas tree and conifer farms

Apply **Biathlon** at 100 pounds per acre after planting or in the spring prior to weed germination or weed removal. A maximum of two applications may be made per growing season. For newly planted field crops irrigate with approximately ½ inch of water to settle the soil around root systems. Apply **Biathlon** prior to weed seed germination and or after a complete removal of weeds.

Note: Do not apply to bedding plants, liner production beds, flowers, ground covers, vegetables or turf. Do not apply to wet foliage.

INDIVIDUAL CONTAINER APPLICATIONS

For situations where broadcast application of the product is not appropriate, apply the product uniformly over the entire container surface at the rates in the following table (1 gm **Biathlon**/sq. ft.):

Container Size	Surface Area (Sq. Ft.)	Grams of Biathlon/ Container	Volume of Biathlon/ Container
1 gal. (6" diam.)	0.20	0.20	1/8 tsp.
2 gal. (9" diam.)	0.44	0.44	1/4 tsp.
3 gal. (10" diam.)	0.55	0.55	1/4 tsp. (rounded)
5 gal. (12" diam.)	0.79	0.79	1/4 tsp. (heaping)
15 gal. (17" diam.)	1.60	1.60	1/2 tsp.

KEY WEEDS CONTROLLED

GRASSY WEEDS

Annual bluegrass	Foxtail, Yellow
Barnyardgrass	Goosegrass
Crabgrass	Kikuyu Grass
Fall Panicum	Sprangletop
Foxtail, Green	

BROADLEAF WEEDS

Bittercress	Oxalis
Common Chickweed	Pearlwort
Cudweed	Pepperweed
Dandelion	Pigweed
Eclipta	Shepherdspurse
Fleabane	Sowthistle
Fireweed	Spurge, Garden
Groundsel	Spurge, Prostrate
Marestail	Spurge, Spotted

LIST OF CROPS TOLERANT TO BIATHLON

Abelia	Lantana
Anise	Lilac
Arborvitae	Lobelia
Aureo-marginata Spindle Tree	Malus
Azalea	Northern Bayberry
Barberry	Oleander
Boxwood	Pittosporum
Butterfly Bush	Privet
Canada Red Chokecherry	Red-Osier Dogwood
Chinese Fringe-Flower	Rhododendron
Cinquefoil	Rose
Clethra	Red epimedium;
Coreopsis	Red barrenwort
Cotoneaster	Sabel Palm
Crape Myrtle	Scotch Pine
Cryptomeria-Japanese-Cedar	Southern magnolia
Deutzia	Speedwell-creeping
Eastern redbud	Spirea
Escallonia	Symphoricarpos Sweet
Euonymus	Sensation
Fire bush	Variiegated Reed Grass
Gardenia	Viburnum
Heavenly Bamboo	Weigela
Hibiscus	Willow-leaved
Holly	sunflower
Jacaranda	Yew
Juniper	

For specific plant names see the container label.

Treatment of ornamental species not listed on the label for Biathlon

The species listed in the table aside have been tested under actual growing conditions and found tolerant at the recommended application rate. Users who wish to use **Biathlon** on ornamental plant species not listed on the label may determine the suitability for use by treating a small number of such plants at the recommended rate. The user assumes responsibility for any plant damage or other liability resulting from use of **Biathlon** on plant species not recommended on the label.

Injury on the following plant species has been observed following applications of Biathlon and use is not recommended.

Ageratum 'Hawaii Blue'	Petunia spp
Clematis	Potentilla fruticosa
'Duchess of Edinburgh'	'Goldfinger'
Dianthus spp.	Salvia spp.
Echinacea spp.	Scabiosa spp.
Erica mediterranea	'Pink Carnival'
Euonymus alata	Sarcococca hookerana
'Compacta'	humilis
Hydrangea spp.	Zinnia spp.

Calibration Pan directions for calibrating applications

1. Place the pan on a level surface in an area similar to where you will be applying **Biathlon**.
2. Fill your applicator with **Biathlon**.
3. Moving at a consistent pace (same pace as desired during actual application), open the applicator gate and apply the **Biathlon** as you pass over the calibration pan. Once past the calibration pan, shut off the applicator.
4. Tip the calibration pan toward your desired rate (such as 100 lb /A) so that the granules collect in that dimple.
5. If the granules are level with the top of the dimple you are calibrated. If overflowing decrease the spreader opening. If not full, increase your spreading opening.

Note: Calibration should be done for every operator if using hand held equipment.

It is also helpful to repeat this procedure a few times for accurate calibration.



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Use of Biathlon according to the labeling is subject to the use precautions and limitations imposed by the label affixed to the bag of Biathlon. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Always read product label prior to product use.

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