MARENGO[®]

Ornamental Herbicide



PRE-EMERGENT HERBICIDE FOR THE CONTROL OF ANNUAL GRASSES, ANNUAL SEDGES, AND BROADLEAF WEEDS IN PRODUCTION ORNAMENTALS, CONIFERS, CHRISTMAS TREES, GREENHOUSE FLOORS, ORNAMENTAL PRODUCTION SITES AND HARDSCAPES.



Product Information Bulletin 507

GENERAL INFORMATION

Marengo is a selective pre-emergent alkylazine herbicide containing the new active ingredient, indaziflam, which belongs to a new MOA (Mode of Action) group 29, a class of herbicides that inhibit cellulose biosynthesis. **Marengo** is very water insoluble and does not volatilize.

Marengo is a soluble concentrate which contains 0.622 lbs. active ingredient of indaziflam per gallon.

Common Name: Indaziflam

Class: Alkylazines

GROUP 29	HERBICIDE
----------	-----------

Packaging: 1/2 gallon container, 4 per case

RESTRICTED ENTRY INTERVAL (REI) AND SIGNAL WORD

REI = 12 hours

Signal Word = **NONE**

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Long-sleeved shirt and pants
- Socks and shoes

MODE OF ACTION

Marengo provides weed control by reducing the emergence of seedlings through inhibition of cellulose biosynthesis (CB inhibitor). **Marengo** does not control plants emerging from tubers, rhizomes, bulbs, corms, existing rootstocks, and woody vegetation.

USE SITES

Marengo is registered for use in production ornamentals (in outdoor nurseries, shadehouses, and hoophouses), conifers, Christmas trees, greenhouse floors (under benches), ornamental production sites and hardscapes.

APPLICATION AND RATES

Marengo should be applied with a properly calibrated sprayer. Uniform application is essential for satisfactory weed control. Apply in a minimum of 10 gallons of water per acre. Irrigation or rainfall is necessary to activate **Marengo**.

Production Ornamentals

Apply **Marengo** as a broadcast, directed spray at 7.5 to 15.5 fl. oz. per acre (0.17-0.36 fl. oz. per 1000 sq.ft.) around ornamentals in 10 to 100 gallons of water.

Conifers and Christmas Trees

Marengo may be used for pre-emergent weed control in conifer nurseries and Christmas tree farms. Apply as a directed spray to soil surrounding established plants. Apply 7.5 to 15.5 fl.oz. of **Marengo** per acre. Do not exceed 18.5 fl.oz. of **Marengo** per acre in a growing season.

NON-SELECTIVE USES

Hardscapes

Marengo may be used to maintain bare ground in non-crop areas, including gravel areas as well as rocky/sandy areas. Apply 9 to 18.5 fl.oz. per acre with uniform coverage to target area.

Ornamental production facilities

Marengo may be used in ornamental production facilities such as greenhouses (floors only), areas covered by landscape fabric, hoophouses, lathhouses and shadehouses to provide bare ground and general weed control beneath benches and potted plants. Make applications to these sites during clean up, sanitation and preparation prior to plant production. Apply 18.5 fl.oz. product per acre with uniform coverage to target area. Water in the application with 0.25 to 0.50 inches of water. Then allow to dry for 24 hours before introducing plant material into the greenhouse.

PARTIAL LIST OF KEY WEEDS CONTROLLED

Annual bluegrass
Bittercress
Chickweed
Clover
Crabgrass
Cudweed
Curly dock
Dandelion
Doveweed
Eclipta
Filaree
Foxtail
Florida pusley

Hairy fleabane Lambsquarters Marestail Mustard Oxalis Parthenium Pigweed Ryegrass Spurge, spotted Sowthistle, annual Shepherd's-purse Willowherb

Groundsel, common

Consult label for complete list of weeds controlled.

SUGGESTED WEED CONTROL STRATEGIES FOR USING MARENGO IN FIELD GROWN ORNAMENTALS

Herbicide performance requires proper soil preparation, calibrated application rates and incorporation of **Marengo** into the soil through irrigation.

Light or sandy loam type soils

7.5 to 11.25 fl. oz.; 4 to 6 months control 11.25 to 15.5 fl. oz.; 6 to 8 plus months control

Heavier or clay/silt type soils

7.5 to 11.25 fl. oz.; 4 to 6 months control 11.25 to 15.5 fl. oz.; 6 to 8 months control

Rock pads, gravel growing block pads etc.

9.0 to 18.5 fl. oz.; 4 to 6 months plus control

Suggested backpack and handheld sprayer mixing Marengo can be applied using backpack or handheld sprayers. For backpack or handheld spray applications, mix 1 teaspoon of **Marengo** per gallon of water. Agitate the mixture to ensure good suspension. If adding glyphosate, mix in after **Marengo**. Recommended spray volume is 100 gallons per acre or approximately 1 gallon per 500 sq. ft. Incorporate **Marengo** by watering in with 0.25 to 0.5 inch of water.

Use of **Marengo** according to the labeling is subject to the use precautions and limitations imposed by the label affixed to the container of **Marengo**. 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. Marengo and Finale are registered trademarks of Bayer. Roundup is a registered trademark of Monsanto. © 06/2014

PARTIAL LIST OF CROPS

Trees

Irees	
Ash	Hawthorn
Aspen	Honeylocust
Birch	Magnolia
Cedar	Maple
Cherry	Oak
Crabapple	Pine
Crape myrtle	Redbud
Cypress	Spruce
Dawn redwood	Tamarisk
Elm	Tupelo
Fir	· ·
Shrubs	
Arborvitae	Juniper
Azalea	Lilac
Boxwood	Loropetalum
Camellia	Nandina
Cotoneaster	Pieris
Dogwood	Rhododendron
Forsythia	Rose
Gardenia	Skip laurel
Hibiscus	Taxus
Holly	Viburnum

For specific plant names see the container label.

Marengo application limitations

The species listed in the above table have been tested under actual growing conditions and found tolerant at the recommended application rate. Users who wish to use **Marengo** 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 **Marengo** on plant species not recommended on the label.

Injury on the following plant species has been observed following applications of **Marengo** and use is not recommended: Japanese Euonymus and Hydrangea. Refer to the container label for the complete listing.

TANK MIX

Do not mix with products containing chlorine bleach.

Note: If weeds are present at time of application, **Marengo** may be mixed with a post-emergent herbicide such as Roundup[®] or Finale[®]. Mix **Marengo** first in the tank then add post-emergent herbicide.



PO Box 51230, Mainland, PA 19451 Technical Service: (800) 356-4647 ohp.com