

ORNAMENTAL PLANTS

General Information

PRODUCT INFORMATION

Marengo G is a selective, pre-emergent alkylazine herbicide. Marengo G provides extended residual control of many annual grasses including crabgrass, goosegrass, and annual bluegrass, as well as annual sedges, and some broadleaf weeds in production nursery including in-ground and container woody plants, ornamentals, non-bearing fruit and nut trees in nurseries and ornamental production facilities (such as shadehouses, lathhouses and hoophouses), as well as hardscapes.

Marengo G controls weeds by reducing the emergence of seedlings through inhibition of cellulose biosynthesis (CB Inhibitor). Necrosis or yellowing may be observed if the herbicide is applied to herbaceous tissue such as leaves and green stems of susceptible plants including sensitive ornamentals. Marengo G does not control plants emerging from tubers, rhizomes, bulbs, corms, existing rootstocks, and woody vegetation.

Marengo G needs to be activated prior to weed germination for most effective control. For maximum activity against germinating weeds, Marengo G requires rainfall or irrigation prior to weed germination.

Marengo G is a highly active herbicide that provides effective weed control when applied to the soil around many woody ornamentals grown in-ground. Marengo G may also be used over-the-top of listed container-grown ornamentals with adequate precautions. Marengo G may damage sensitive plants, if granules are allowed to remain in contact with foliage. Carefully apply Marengo G in strict accordance to the label. Be sure to follow all label instructions.

PRODUCT USE RESTRICTIONS

- Do not exceed 200 lbs of Marengo G per acre (4.6 lbs/1000 sq ft) in a single application for ornamental applications.
- Do not exceed 400 lbs of Marengo G per acre (9.2 lbs/1000 sq ft) for all applications within a 12-month period.
- Do not contaminate water intended for irrigation and domestic use.
- Do not apply using aerial application equipment.

- Marengo G is not for sale, distribution, or use in Nassau county, or Suffolk county, New York.

APPLICATION INFORMATION

Apply Marengo G with clean, properly calibrated drop, rotary, hand shaker or other spreader equipment according to the manufacturer's directions. Check periodically to be certain that the equipment is working properly prior to each use. Uniform application is essential for satisfactory weed control.

IRRIGATION AND WATERING AFTER APPLICATION

Marengo G will provide residual weed control when adequate moisture is present and the application is followed by rain or irrigation within 21 days and prior to weed seed germination. With dry soil, use 0.25 inch of irrigation water, and with soil at or greater than field capacity; reduce the amount of irrigation water. In either case, do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation. For application to ornamentals over-the-top, irrigate within 1 hour to wash granules from the leaf surface and activate the product into the soil.

RESISTANCE MANAGEMENT

Marengo G controls weeds by inhibiting cellulose biosynthesis. Cellulose is a component in the formation of plant cell walls. Marengo G is classified as a Group 29 herbicide. No known resistance to Marengo G exists, and there are no known instances of cross-resistance between Marengo G and other classes of herbicides with other modes of action. Performance of Marengo G is not affected by the presence of biotypes resistant to glyphosate, triazines, ALS inhibitors, mitotic inhibitors, growth regulators, or herbicides with other modes of action.

Prolonged use of any herbicide with the same mode of action may lead to selection of resistant weed populations and a reduction in efficacy. Rotation of herbicides with an alternate mode of action can help prevent the development and spread of resistant weed populations. If resistance to Marengo G is suspected, use a herbicide with an alternate mode of action.

The decision to use any particular herbicide should be based on an IPM program and all cultural practices and other pesticides in use.

Limitations, Restrictions, and Exceptions

ORNAMENTALS

Marengo G may be applied for pre-emergent weed control in production ornamentals in outdoor nurseries, shadehouses, and hoophouses. Apply Marengo G, prior to weed seed germination to dormant or actively growing ornamentals as listed in the table of the label. Apply Marengo G to established ornamentals. If the grower is uncertain about ornamental establishment after transplanting, wait 2 months before applying Marengo G.

USE RESTRICTIONS FOR MARENGO G ON PRODUCTION ORNAMENTALS

- Do not exceed the maximum single application rates specified under each ornamental use
- Do not exceed a total of 400 lbs of Marengo G per acre (9.2 lbs/1000 sq ft) in a 12-month period.
- Do not allow granules applied “over-the-top” to remain in contact with foliage. Marengo G may cause localized injury to the foliage, especially young leaf tissue. If the granules should be in contact with the foliage after an application, wash off affected foliage.
- Do not use Marengo G on ornamentals where granules may become trapped in developing leaves or in meristematic areas (e.g. whorls of grasses and perennials such as hosta).
- Do not use Marengo G around bedding plants (including annuals and herbaceous plants not specified, or not listed as tolerant on this label).
- Do not use Marengo G around non-bearing fruit trees unless they are at least 1 year old (citrus), 5 years old (grape vines) and 3 years old (all others). Non-bearing trees are defined as trees that will not bear fruit until at least 1 year after treatment.
- Do not use Marengo G within the dripline of bearing fruit and nut trees.
- Do not mix Marengo G into the soil or potting mix. Mixing Marengo G into the potting mix may inhibit developing roots.
- Do not cultivate or disturb the soil surface after application of Marengo G as this may reduce weed control.
- If transplanting mature plants listed as tolerant on this label into soil treated with Marengo G within the preceding 12 months, replace existing soil around roots to minimize effects on plant establishment.
- Do not use Marengo G on ornamentals being grown in a greenhouse.
- Do not use Marengo G on nursery seedbeds, rooted cuttings, or young plants in liners.
- Do not apply Marengo G to plants growing in containers less than 6 inches wide.
- Do not apply Marengo G to plants less than 5 inches in height.

- Do not apply Marengo G to ornamental bulbs in production fields, landscapes, commercial fields, or residential sites after they have emerged.
- Do not apply Marengo G to herbaceous perennials on this label (e.g. daylily or hosta) after they have emerged.
- Do not apply Marengo G over-the-top of a deciduous ornamental at bud break.
- Do not apply Marengo G to unhealed budded grafts or other types of grafts.
- Do not apply Marengo G to drainage ditches

USE OF MARENGO G ON ORNAMENTALS IN COARSE AND SANDY SOILS

Soil conditions can affect the tolerance of ornamentals to Marengo G. Coarse or sandy soils may allow for downward movement of Marengo G into the root zone and cause significant root damage and phytotoxicity. Coarse soils, for example, may include significant quantities of sand, gravel, decomposed granite, and ground cinders. Prior to application of Marengo G on these soils, confirm soil texture with a soil test. Ornamentals grown in soil exceeding 80% sand or 20% gravel may be at risk.

If Marengo G is to be applied in these soils, evaluate tolerance of a few plants of each ornamental in Marengo G treated soil for 2-3 months prior to a large scale application.

SYMPTOMS OF MARENGO G INJURY ON ORNAMENTALS

Marengo G may injure sensitive ornamentals by damaging roots or leaves. Plants damaged by root uptake will appear stunted, deformed, and may not recover. If granules of Marengo G are allowed to remain in contact with treated plants, leaf symptoms may appear as lesions, discoloration, or curling. Symptoms may appear within 2-4 weeks after application. Newly formed leaves may be undamaged. It is essential that the user assess the severity of any symptoms on cultivars not listed on this label, before proceeding with large-scale applications of Marengo G.

PRODUCTION ORNAMENTAL USES

IN-GROUND

Marengo G provides 3-8 months of weed control with a single application. The exact length of control depends on many environmental factors as well as the weeds to be controlled and weed pressure. Marengo G may be applied to the soil surface around established field or container grown deciduous and evergreen plants. To avoid root damage, do not apply Marengo G until 2 months after transplanting bare rooted stock, and make sure that soil is well settled around the root area. If

transplanting potted plants or balled and burlapped ornamental stock, apply Marengo G after the soil is well settled.

Overhead irrigation or rainfall will help to settle the soil and seal surface cracks. Application of Marengo G can be made around dormant or actively growing plants. If applied after dormancy, care should be taken not to contact expanding buds or new leaves. Do not apply to trees that are less than one year old or have been transplanted less than one year, unless completely protected by non-porous wraps, grow tubes, waxed protectors or other forms of protection to young foliage and/or bark. Applications of Marengo G should only be made to ornamentals listed on this label.

Marengo G should be applied to soil free of weeds, debris, and soil clods for optimum efficacy.

Herbicidal efficacy may be reduced if soil is disturbed after application. A follow-up application may be made if the total applied per year is less than 400 lbs of Marengo G per acre (9.2 lbs/1000 sq ft).

Planting into soil treated with Marengo G should be delayed for 3 months to allow for dissipation of the product.

AMOUNT TO USE: Apply Marengo G to the soil around ornamentals at 100-200 lbs of Marengo G per acre (2.3-4.6 lbs/1000 sq ft).

CONTAINER

Marengo G may be applied as a single or in sequential applications over-the-top to container-grown, deciduous, and evergreen trees and shrubs with an established root system. Application of Marengo G to deciduous foliage or green bark may result in unacceptable injury. Over-the-top applications should be made to dry foliage. Applications made to wet foliage may cause the product to stick to the foliage and lead to localized injury. Ornamentals should be established in the container for at least 1 weeks to allow the soil to settle and plants should be at least 5 inches tall prior to applying Marengo G. Plants transplanted into containers must be done using weed free soil. Old, exposed soil mixes risk weed seed to germinate deeper in the pot. Marengo G will not prevent shoot emergence from the deeper weeds. Remove granules from the leaves after application. Examine plants to make sure that granules that may have adhered to foliage have been removed. If granules remain on the leaves, plant injury may occur. If irrigating, do not create conditions that cause visible run-off of irrigation water.

APPLICATION OF MARENGO G ON HERBACEOUS PLANTS

Marengo G may injure many annuals, perennials, and foliage plants. The product should not be applied to these plants unless they are listed on this label as tolerant.

APPLICATION of MARENGO G TO ORNAMENTALS IN INDIVIDUAL CONTAINERS

Make sure that granules are evenly distributed on the soil surface.

For example, to apply Marengo G at a use rate of 200 lbs of product per acre (4.6 lbs/1000 sq ft), spread 0.34 grams into a 6-inch pot.

ORNAMENTALS AND THEIR CULTIVARS TOLERANT TO MARENGO G

Tolerant ornamentals and their cultivars are listed in the following table. If a cultivar to be treated is not listed on this label, treat several plants of the cultivar at the single maximum use rate (200 lbs per acre (4.6 lbs/1000 sq ft)) and evaluate 1-2 months later for possible injury and acceptable tolerance.

Method

[Soil Surface](#)

Restricted Entry Interval

12 hours

Timings

[Preemergence \(Weed\)](#)