STATE OF HAWAII
Department of Agriculture
ACCEPTED
LICENSE NO.
9346.402

GROUP 29 HERBICIDE

BAYER

Marengo®

Pre-emergent Herbicide for the Control of Annual Grasses, Annual Sedges and Annual Broadleaf Weeds in Production Ornamentals, Conifers, Christmas Trees, Greenhouse Floors, Production Sites and Hardscapes

DO NOT USE FOR THE MANUFACTURING OF FERTILIZER

ACTIVE INGREDIENT:

Indaziflam.....7.4%

OTHER INGREDIENTS:.....92.6%

Total 100.0%

Contains 0.622 lbs active ingredient per gallon

EPA Reg. No. 432-1518

KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

See inside leaflet for complete First Aid Instructions, Precautionary Statements, Directions for Use and Storage and Disposal Instructions.

Net Contents
64 Fl Oz (1.9 L)

84967874
84919667A 160211AV3

FIRST AID

If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
If in eyes:	• Hold eyes open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, and shoes plus socks.

Follow 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.

ENGINEERING CONTROLS STATEMENTS:

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean watermark. Do not contaminate water when disposing of equipment rinsate or washwater. This product may enter water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product

is applied and surface water features including ponds, streams, and springs will reduce the potential for getting into water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.
This product may enter water through drift of spray in wind. Follow precautions for use to avoid wind spray drift.
Surface Water Advisory: This pesticide may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.
Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

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 application. For any requirements specific to your State or Tribe, consult the 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 intervals. The requirements in this box only apply to uses of this product 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 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 coveralls, waterproof gloves and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of the treated areas until sprays have dried.

PRODUCT INFORMATION

Marengo® is a selective, pre-emergent alkylazine herbicide. Marengo provides extended residual control of many annual grasses including crabgrass, goosegrass, and annual bluegrass, as well as annual sedges, and broadleaf weeds in production nurseries including in-ground

and pot-in-pot container grown ornamentals, conifers and Christmas trees, non-bearing fruit and nut trees in nurseries greenhouse floors (under benches), ornamental production facilities (such as shadehouses, hoophouses, and lathhouses), and hardscapes. Marengo also demonstrates limited early post-emergent activity against some weeds, including annual bluegrass, crabgrass and oxalis.

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

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

Marengo is a highly active herbicide that provides effective weed control when applied to the soil around many field grown woody ornamentals. Marengo may damage sensitive plants, if the product is allowed to remain in contact with foliage. Carefully apply Marengo in strict accordance to the label. Be sure to follow all label restrictions.

PRODUCT USE RESTRICTIONS

- Do not exceed the maximum single application rates specified under each use.
- Do not exceed 18.5 fl oz per acre of Marengo for all applications within a 12 month period.
- Do not contaminate water intended for irrigation and domestic use.
- Do not apply within 25 feet of ponds, lakes, rivers, streams, wetlands, and habitat containing aquatic and semi-aquatic plants when Marengo is used on production nurseries and non-crop areas (excluding lawns).
- Do not apply Marengo through an irrigation or chemigation system.
- Do not apply Marengo by air.
- Follow use precautions and restrictions on this label and for all tank-mix partners, if mixing Marengo with other pesticides.
- Marengo is not for sale, distribution, or use in Nassau County or Suffolk County in New York State.

Not all products are registered in all states; please verify state registration of these products in your state before selling, distributing, or using.

DEACTIVATING Marengo

Activated charcoal has been shown to deactivate Marengo if applied within several days of application. Application of activated charcoal within 2 weeks of an application of Marengo will not reverse phytotoxic symptoms immediately, but it will aid in recovery over time. Follow directions for the amount of charcoal to apply on the label of the activated charcoal.

SPRAY DRIFT MANAGEMENT

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator or grower. To reduce the potential for drift, the application equipment must be set to apply medium to very coarse droplets (i.e., ASAE Standard 572) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

Wind
Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty, below 2 mph, or in excess of 10 mph and moving in the direction of adjacent areas of sensitive crops or plants. Do not apply during temperature inversions. Always make applications when there is some air movement to determine the direction and distance of possible spray drift. Local terrain may influence wind patterns; the applicator should be familiar with local conditions and understand how they may impact spray drift. Boom or nozzle shielding can reduce the effects of wind or air currents on drift. Verify that the shields do not interfere with uniform deposition of product prior to application.

Temperature Inversion
A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Avoid application when conditions are favorable to inversion. Presence of ground fog is a good indicator of a surface temperature inversion.

Sensitive Areas
Sensitive areas to Marengo are defined as bodies of water (ponds, lakes, rivers, and streams), wetlands, habitats for endangered species, and non-labeled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas.

Spray Drift Management (Ornamentals):
Apply Marengo to dormant (prior to bud break) or actively growing plants. In either case, the spray must be directed at the base of the plant or away from the plant. Do not allow Marengo to come in contact with the foliage, as some leaf malformations or discoloration may occur. Minimize contact with above ground stems.

Spray Drift Management (Conifers/Christmas Trees):
For Christmas trees and conifers, direct the spray to the base of the trees with a band or with a broadcast application. Do not allow Marengo to come into contact with the foliage.

APPLICATION INFORMATION
Apply Marengo with a properly calibrated sprayer according to the manufacturer's directions and check periodically to be certain that the equipment is working properly prior to each use. Uniform application is essential for satisfactory weed control. Avoid skips for the best weed control.

Application Volume
Apply Marengo in a minimum of 10 gallons of water per acre (1 quart of water per 1000 sq ft) and ensure adequate coverage for optimum weed control.

IRRIGATION AND WATERING AFTER APPLICATION
Marengo will provide residual weed control when adequate moisture is present and the application is followed by rain or irrigation (0.125 to 0.25 inches) within 21 days and prior to weed seed germination. Do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

MIXING AND COMPATIBILITY
Mixing Instructions
Marengo should be added to the tank and agitated, prior to introduction of another pesticide. Mix the amount of Marengo needed for immediate application needs. Settling can occur if the spray mixture is allowed to sit over an extended period of time. Marengo is stable in spray solution for up to 48 hours after mixing. Re-agitate the spray solution before application.

Compatibility Testing With Other Pesticides
Marengo is generally compatible with many pesticides and liquid fertilizers. A compatibility

test should be conducted with any potential tank-mix partner with Marengo. Using a clear container, conduct the test as described below:

1. Fill the container three-quarters full with water.
2. Add the products to be tank-mixed in the following order: (a) wettable powders (b) dry flowable, (c) aqueous suspensions, (d) Marengo*, (e) liquids, (f) solutions and emulsifiable liquid concentrates, (g) micronutrients and liquid fertilizers.
3. Shake or stir after each addition to mix thoroughly.
4. After adding all ingredients, let the mixture stand for 15 minutes and look for separation, large flakes, precipitates, gels, and heavy oily film or other signs of incompatibility.
5. If the compatibility test shows signs of incompatibility, do not tank-mix the product tested with Marengo.

***Note that a labeled spray rate for Marengo should be used in any compatibility test. Dilute from a concentrated suspension, or sample from a properly diluted spray solution.**

SPRAYER CLEANUP PROCEDURE

Spray equipment used to apply Marengo **must be cleaned prior to use on sensitive ornamentals, or injury may result.** Before and after using Marengo, triple rinse all mixing and spray equipment, including tanks, pumps, lines, filters, screens, and nozzles with a good quality tank cleaner on an approved rinse pad. Proper PPE must be worn while cleaning. Follow the directions below.

For each rinse cycle, complete the following:

- Completely drain the spray and mixing tanks.
- Rinse the spray tank inside and outside including all lines and screens. A rotating cleaning nozzle may be beneficial to dislodge any product from the sides of the tank.
- Fill the tank with water and cleaner.
- Circulate solution to ensure that the pumps, valves, and all lines are flushed.
- Remove and clean all filters, screens, and nozzles.
- Drain all cleaning solution and then rinse once more with clean water.
- Visually inspect the filters, screens, and tank walls to ensure that no product remains.
- Dispose of rinsate in an approved way.

RESISTANCE MANAGEMENT

Marengo controls weeds by inhibiting cellulose biosynthesis. Cellulose is a component in the formation of plant cell walls. Marengo is classified as a Group 29 herbicide. No known resistance to Marengo exists, and there are no known instances of cross-resistance between Marengo and other classes of herbicides or other modes of action. Performance of Marengo 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 is suspected, use a herbicide with an alternate mode of action. The decision to use a particular herbicide should always be based on an IPM program and involve consideration of all cultural practices and other pesticides in use.

Weeds Controlled or Suppressed by Marengo**	
Broadleaf Weeds	
American black nightshade	*Solanum americanum*
American burnweed (Fireweed)	*Erechtites hieraciifolia*
Bittercress	*Cardamine sp.*
Black medic*	*Medicago lupulina*
Buckwheat, Wild	*Polygonum convolvulus*
California burclover	*Medicago polymorpha*
Canada thistle, Common	*Circium arvense*
Chickweed, Common	*Stellaria media*
Chickweed, Mouse-ear	*Cerastium vulgatum*
Clover, White	*Trifolium repens*
Corn speedwell	*Veronica arvensis*
Cudweed, Linear-leaf/purple	*Gnaphalium purpureum*
Curly dock	*Rumex crispus*
Dandelion, Cat's Ear	*Hypochoeris radicata*
Dandelion, Common	*Taraxacum officinale*
Eclipta	*Eclipta alba*
Evening primrose, Common	*Oenothera biennis*
Evening primrose, Cutleaf	*Oenothera laciniata*
False chamomile*	*Matricaria maritima*
Filaree, Redstem	*Erodium cicutarium*
Florida pusley	*Richardia scabra*
Groundsel, Common	*Senecio vulgaris*
Hairy fleabane	*Erigeron bonariensis*
Hairy nightshade	*Solanum sarrachoides*
Henbit	*Lamium amplexicaule*
Horseweed/ Marestail	*Conyza canadensis*
Kochia	*Kochia scoparia*
Lambsquarters, Common	*Chenopodium album*
Lawn burweed	*Soliva sessilis*
Little mallow	*Malva parviflora*
London rocket*	*Sisymbrium irio*
Longstalked phyllanthus	*Phyllanthus tenellus*

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Weeds Controlled or Suppressed by Marengo**	
Broadleaf Weeds	
Mustard, Black*	*Brassica nigra*
Mustard, Wild	*Sinapis arvensis*
Parthenium	*Parthenium hysterophorus*
Pigweed, Prostrate	*Amaranthus blitoides*
Pigweed, Redroot	*Amaranthus retroflexus*
Plantain, Buckhorn	*Plantago lanceolata*
Plantain, Paleseed	*Plantago virginica*
Prostrate knotweed	*Polygonum aviculare*
Prostrate spurge	*Euphorbia maculate*
Puncturevine	*Tribulus terrestris*
Purslane, Common	*Portulaca oleracea*
Ragweed, Common*	*Ambrosia artimisiifolia*
Spurge, Spotted	*Euphorbia maculate*
Tassel flower	*Emilia sonchifolia*
Redmaids	*Calandrinia spp.*
Sesbania, Hemp*	*Sesbania exaltata*
Shepherd's-purse	*Capsella bursa-pastoris*
Sida, Prickly/Teaweed*	*Sida spinosa*
Southern brassbuttons*	*Cotula australis*
Sowthistle, Annual	*Sonchus oleraceus*
Sunflower*, Common	*Helianthus annuus*
Swinecress	*Coronopus didymus*
Tropic ageratum	*Ageratum conyzoides*
Velvetleaf*	*Abutilon theophrasti*
Vetch, Purple*	*Vicia benghalensis*
Wild carrot*	*Daucus carota*
Willowherb	*Epilobium brachycarpum*
Woodsorrel, Yellow*	*Oxalis stricta*
Woodsorrel/Oxalis*	*Oxalis sp.*

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Weeds Controlled or Suppressed by Marengo**	
GRASSES, MONOCOTS, AND SEDGES	
Annual bluegrass/ 'Poa'	*Poa annua*
Annual kyllinga	*Cyperus sesquiflorus*
Barnyardgrass, Common	*Echinochloa crus-galli*
Cheatgrass	*Bromus secalinus*
Crabgrass	*Digitaria sp.*
Crabgrass, Henry	*Digitaria ciliaris*
Crabgrass, Large/Hairy	*Digitaria sanguinalis*
Crabgrass, Smooth	*Digitaria ischaemum*
Doveweed	*Murdannia nudiflora*
Foxtail brome	*Bromus rubens*
Foxtail, Giant	*Setaria faberi*
Foxtail, Green	*Setaria viridis*
Foxtail, Yellow	*Pennisetum glaucum*
Goosegrass	*Eleusine indica*
Guineagrass	*Panicum maximum*
Kyllinga, Fraqrant/Annual	*Kyllinga odorata*
Mouse barley	*Hordeum murinum*
Red brome	*Bromus rubens*
Rice flatsedge	*Cyperus iria*
Ryegrass, Italian	*Lolium multiflorum*
Ryegrass, Perennial	*Lolium perenne*
Sandbur	*Cenchrus longispinus*
Sedge, Annual***	*Cyperus spp.*
Tufted lovegrass	*Eragrostis pectinacea*

* Weeds suppressed by Marengo

** Higher labeled rates should be used if weed pressure is historically high or longer residual control is desired (See Use Rates in the Marengo chart). Weed control can also be achieved with multiple applications of Marengo. Do not exceed a total of 18.5 fl oz per acre per year with multiple applications.

*** Marengo only controls sedges and annual kyllinga emerging from seed. It does not control perennial sedge emerging from nutlets or perennial forms of kyllinga.

ORNAMENTALS, CHRISTMAS TREES, AND CONIFER PLANTATIONS

Marengo may be applied for pre-emergent weed control in production ornamentals in outdoor nurseries, shadehouses, hoophouses, Christmas trees, and conifer plantations. Apply Marengo as a directed spray, prior to weed seed germination to the soil surface around dormant or actively growing ornamentals as listed in the table below. Apply Marengo to established ornamentals. If the grower is uncertain about ornamental establishment after transplanting, wait 2 months before applying Marengo.

USE RESTRICTIONS FOR Marengo ON PRODUCTION ORNAMENTALS, CHRISTMAS TREES, AND CONIFERS

- Do not exceed the maximum single application rates specified under each Ornamental use.
- Do not exceed a total of 18.5 fl oz of Marengo per acre in a 12 month period.
- Do not allow spray to contact foliage. Marengo may cause localized injury to the foliage, especially young leaf tissue. If the spray should contact the foliage, remove affected foliage or wash off immediately.
- Do not use Marengo around bedding plants (annuals and herbaceous plants not specified, or not listed as tolerant on this label).
- Do not use Marengo around bearing fruit and nut trees.
- Do not use Marengo 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 within the dripline of bearing fruit and nut trees.
- Do not mix Marengo into the soil. Cultivating or disturbing the soil surface after application may reduce weed control activity.
- If transplanting mature plants listed as tolerant on this label into soil treated with Marengo within the preceding 12 months, discard existing soil from the planting hole and add new soil around roots to minimize effects on plant establishment.
- Do not use Marengo on ornamentals being grown in a greenhouse.
- Do not use Marengo on nursery seedbeds, rooted cuttings or young plants in liners.
- Do not apply Marengo to ornamentals growing in containers except pot-in-pot ornamentals.
- Do not apply Marengo to ornamental bulbs in production fields.
- Do not apply Marengo to ornamental bulbs in commercial fields after they have emerged.
- Do not apply Marengo to herbaceous perennials (e.g. hosta) after they have emerged.
- Do not apply Marengo over-the-top of ornamentals.
- Do not apply Marengo to budded grafts or graft unions as this could cause plant injury or death.
- Do not apply Marengo by air.

USE OF Marengo ON ORNAMENTALS IN COARSE AND SANDY SOILS

Soil conditions can affect the tolerance of ornamentals to Marengo. Excessively coarse or sandy soils may allow for downward movement of Marengo 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 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 is to be applied in these soils, evaluate tolerance of a few plants of each ornamental in Marengo treated soil for 2-3 months prior to a large scale application.

SYMPTOMS OF Marengo INJURY ON ORNAMENTALS

Marengo may injure sensitive ornamentals by damaging roots or leaves. Plant foliage dam-

aged by root absorption will appear stunted, deformed, and may not recover. If Marengo is allowed to contact leaves, leaf symptoms including leaf spot, leaf discoloration, and leaf curl may appear. Symptoms appear within several days after application. Leaves formed after appearance of symptoms may recover.

Users must assess the severity of any symptoms on cultivars not listed on this label, before proceeding with large-scale applications of Marengo. The user assumes all responsibility for damage on cultivars not listed on this label.

PRODUCTION ORNAMENTAL USES

Marengo provides up to 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 the weed pressure. Apply Marengo as a directed spray to the soil surface only to established (rooted) plants in the soil or in pots and not to newly rooted cuttings/or seedling beds in production nurseries. Do not apply Marengo to newly rooted cuttings/or seedling beds. To avoid root damage, apply Marengo around transplants when the plant is well established and the soil has firmly settled around the root area. Irrigation or rainfall will help to settle the soil and seal surface cracks. Apply Marengo around dormant plants. If applied after dormancy, care should be taken not to contact expanding buds or new leaves. Applications of Marengo should only be made to ornamentals listed on this label. Marengo 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.

Application of Marengo to deciduous foliage or green bark may result in unacceptable injury. Apply Marengo to established ornamentals. If the grower is uncertain about ornamental establishment after transplanting, wait 2 months before applying Marengo.

AMOUNT TO USE: Apply Marengo as a broadcast, directed spray at 7.5-15.5 fl oz of Marengo per acre (0.17 -0.36 fl oz per 1,000 sq ft) around ornamentals in 20-100 gallons of water per acre (0.5-2.3 gallons of water per 1,000 sq ft). When applying Marengo with a backpack sprayer, follow all above restrictions.

To activate Marengo for maximum herbicidal benefit, irrigate the area treated with Marengo to move the herbicide into the soil within 21 days after application. With dry soil, use a minimum of 0.25 inches of irrigation water. 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.

A subsequent application of Marengo can be made within 90 days after the initial application provided that the maximum allowed rate does not exceed 18.5 fl oz per acre in a 12-month period.

COMBINATIONS OF Marengo WITH NON SELECTIVE HERBICIDES AROUND ORNAMENTALS

Remove existing weed growth before application of Marengo or use a post-emergence herbicide labeled for control. Marengo may be used in combination with a non-selective herbicide such as Finale®. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of trees, shrubs, or other desirable vegetation, since severe damage may result. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield while spraying to help prevent spray from contacting foliage of desirable plants.

Do not apply Marengo to plant types not listed as tolerant on this label. Marengo may be applied to cultivars of listed tolerant plants that are not listed on this label. Prior to large-scale applications, treat a small number of such plants at the desired use rate. Treated plants should

then be evaluated 1 to 2 months after application for possible injury and acceptable tolerance.

IMPORTANT: Direct application of Marengo to the soil surface and away from plant foliage and bark. Avoid direct spray contact on plant surfaces, foliage, and green bark or injury may result. Application of Marengo after bud swell may cause injury if herbicide contacts foliage. Avoid application under environmental conditions that favor drift to non-targeted areas. Deep cultivation reduces the effectiveness of Marengo and should be avoided.

ORNAMENTALS AND THEIR CULTIVARS TOLERANT TO Marengo

Tolerant ornamentals and their cultivars are listed in the following table. Apply as a directed spray around tolerant ornamentals. If a cultivar to be treated is not listed on this label, treat several plants of the cultivar at the single maximum desired use rate and evaluate 1-2 months later for possible injury and acceptable tolerance. The user assumes responsibility for application on plants not listed in this table.

Common Name	Scientific Name	Cultivar
Abelia	*Abelia grandiflora*	
Apple	*Malus sp.*	(non-bearing)
Apple	*Malus domestica*	Haralred (non-bearing)
Arborvitae	*Thuja occidentalis*	Nigra
Arborvitae	*Thuja occidentalis*	Techny
Arborvitae	*Thuja occidentalis*	Green Giant
Aspen, Quaking	*Populus tremuloides*	
Azalea	*Rhododendron sp.*	Girard's Rose
Azalea	*Rhododendron sp.*	Fashion
Azalea	*Rhododendron sp.*	VF 14
Azalea	*Rhododendron sp.*	Golden Torch
Azalea, Encore	*Rhododendron sp.*	Autumn Debutante
Bamboo, Golden	*Phyllostachys aurea*	
Birch	*Betula populifolia*	Whitespire
Birch, River	*Betula nigra*	Heritage
Birch, River	*Betula nigra*	
Black Tupelo	*Nyssa sylvatica*	Wild Fire
Boxwood	*Buxus microphylla*	Green Beauty
Boxwood	*Buxus microphylla*	Chicagoland Green
Boxwood	*Buxus microphylla*	Baby Gem
Boxwood	*Buxus microphylla*	Wintergreen
Butterfly bush	*Buddleia*	Nanho Blue
Camellia	*Camellia japonica*	Margaret Heathcliff Pink

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Common Name	Scientific Name	Cultivar
Camellia	*Camellia sasanqua*	Cleopatra Pink
Catalpa, Southern	*Catalpa bignoniaceae*	
Cedar, Atlantic white	*Chamaecyparis sp.*	
Cedar, Eastern Red	*Juniperus virginiana*	
Cedar, Japanese	*Cryptomeria japonica*	Black Dragon
Cedar, Japanese	*Cryptomeria japonica*	Burkii
Cedar, Japanese	*Cryptomeria japonica*	Yoshino
Cherry, American Plum	*Prunus americana*	
Cherry, Okame	*Prunus x incamp*	
Cherry,	*Prunus serrulata*	Kwanzan
Cherry, Purple Leaf Sand	*Prunus cistena*	
Cherry, Sargent	*Prunus sargentii*	Spring Wonder
Cherry, Yoshino	*Prunus x yedoensis*	Yoshino
Chokeberry	*Aronia sp.*	
Cotoneaster	*Cotoneaster dammeri*	Coral Beauty
Cottonwood	*Populus deltoides*	Sioux
Crabapple	*Malus x 'Harvest Gold'*	
Crabapple	*Malus x 'Snowdrift'*	
Crabapple	*Malus coronaria*	
Crape myrtle	*Lagerstroemia indica x fauriei*	
Crape myrtle	*Lagerstroemia x 'Miami'*	
Crape myrtle	*Lagerstroemia indica x fauriei*	Tuscarora
Cypress, false	*Chamaecyparis sp.*	Gold Mops
Cypress, Mediterranean	*Cupressus sempervirens*	
Cypress, Leyland	*Cupressus x leylandii*	
Dawn Redwood	*Metasequoia glyptostroboides*	
Dogwood, Kousa	*Cornus kousa*	Kousa
Elm, American	*Ulmus americana*	
Elm, Bosque	*Ulmus parvifolia*	
Eucalyptus, Silver Dollar Gum	*Eucalyptus polyanthemos*	
Euonymus	*Euonymus alatus*	Compacta
Fir	*Abies fraseri*	
Florida Pipestem	*Leucothoe populifolia*	

(continued)

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Common Name	Scientific Name	Cultivar
Forsythia	*Forsythia*	Lynwood
Forsythia	*Forsythia sp.*	Golden Bells
Fragrant tea olive	*Osmanthus fragrans*	
Gardenia	*Gardenia radicans*	Radicans
Gardenia	*Gardenia jasminoides*	Mystery
Gardenia	*Gardenia jasminoides*	Frostproof
Green ash	*Fraxinus pennsylvanica*	
Green ash	*Fraxinus pennsylvanica*	Georgia Gem
Hawthorn, Thornless	*Crataegus crus-galli*	Inermis
Hibiscus, Chinese	*Hibiscus rosa-sinensis*	San Diego Red
Holly	*Ilex x aquip*	
Holly	*Ilex x attenuata*	East Palatka
Holly, Chinese	*Ilex cornuta*	Needlepoint
Holly, Foster	*Ilex x attenuata*	Fosteri
Holly, Gallberry	*Ilex glabra*	Densa
Holly, Meservae	*Ilex meservae*	Blue Princess
Holly, Nellie R. Stevens	*Ilex*	Nellie R. Stevens
Holly, American	*Ilex opaca*	
Holly	*Ilex verticillata*	Jim Dandy
Holly	*Ilex verticillata*	Red Sprite
Holly, Japanese	*Ilex crenata*	Sky Pencil
Honeylocust	*Gleditsia tricanthos*	Sunburst
Honeylocust	*Gleditsia tricanthos*	Skyline
Indian Hawthorn	*Raphiolepsis indica*	Pink Lady
Japanese cleyera	*Ternstromia gymnanthera*	
Japanese mock-orange	*Pittosporum tobira*	Variegata
Juniper, Bar Harbour	*Juniperus horizontalis*	Bar Harbour
Juniper, Blue Pacific	*Juniperus conferta*	Blue Pacific
Juniper, Blue Rug	*Juniperus horizontalis*	Blue Rug
Juniper, Brodie	*Juniperus virginiana*	
Juniper, Spartan	*Juniperus chinensis*	Spartan
Lilac	*Syringa x 'Penda'*	Bloomerang
London plane tree	*Plantanus acerifolia*	

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Common Name	Scientific Name	Cultivar
Loropetalum	*Loropetalum chinensis*	Burgundy
Loropetalum	*Loropetalum chinensis*	Ruby
Magnolia	*Magnolia grandiflora*	Bracken Brown Beauty'
Magnolia	*Magnolia grandiflora*	Little Gem
Magnolia, Jane	*Magnolia liliflora 'Nigra' x M. stellata*	Rosea
Maple, Autumn Blaze	*Acer freemanii*	Jeffersred
Maple, Red	*Acer rubrum*	
Maple, Red	*Acer rubrum*	Red Sunset
Maple, Red	*Acer rubrum*	October Glory
Maple, Sugar	*Acer saccharum*	
Maple, Sugar	*Acer saccharum*	Commemoration
Oak, Southern Live	*Quercus virginiana*	
Oak, Cathedral Live	*Quercus virginiana*	SDLN
Oak, Northern Red	*Quercus rubra*	
Oak, Nuttal	*Quercus nuttallii*	
Oak, Shumard	*Quercus shumardii*	
Ohio buckeye,	*Aesculus glabra*	
Pear, Callery	*Pyrus calleryana*	Chanticleer
Pear, Callery	*Pyrus calleryana*	Bradford
Pine, Canary Island	*Pinus canariensis*	
Pine, Eastern White	*Pinus strobus*	
Pine, Scotch	*Pinus sylvestrus*	
Pistache, Texas	*Pistacia texana*	
Plum, Crimson Pointe	*Prunus x cerasifera*	Cipriozam
Podocarpus	*Podocarpus macrophyllus*	
Privet	*Ligustrum sp.*	
Redbud, Eastern	*Cercis canadensis*	MN Strain
Redbud	*Cercis reniformis*	Oklahoma
Rhododendron	*Rhododendron x crete*	
Rose	*Rosa wichurana*	Dr. Huey
Rose	*Rosa sp.*	Pink Knock Out®
Rose	*Rosa sp.*	Knock Out®
Rose, Virginia	*Rosa virginiana*	

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Common Name	Scientific Name	Cultivar
Rose of Sharon	*Hibiscus syriacus*	Pink Heart
Rose of Sharon	*Hibiscus syriacus*	Boule de Feu
Skip Laurel	*Prunus laurocerasis*	
Spruce, Blackhills	*Picea glauca*	
Spruce, Norway	*Picea abies*	
Tamarisk	*Tamarix ramosissima*	Pink Cascade
Taxus (Yew)	*Taxus cuspidata*	Capitada
Viburnum, Burkwood	*Viburnum x burkwoodii*	
Virbunum	*Virbunum lantana*	Mohican
Viburnum, Popcorn	*Viburnum plicatum*	Popcorn

Do not use Marengo on any of these plants, as injury will occur.

Common Name	Scientific Name
Blue fescue grass	*Festuca glauca*
Columbine	*Aquilegia canadensis*
Coneflower	*Echinacea purpurea*
Croton	*Codiaeum variegatum*
Dianthus	*Dianthus sp.*
Euonymus, Japanese	*Euonymus japonicus*
Fountain grass	*Pennisetum alopecuroides*
Fountain grass, Purple	*Pennisetum setaceum*
Golden Dewdrops	*Duranta erecta*
Hydrangea	*Hydrangea macrophylla*
Ixora	*Ixora coccinea*
Lavender, Munstead	*Lavandula angustifolia*
Lilyturf	*Liriope sp.*
Mint	*Mentha sp.*
Mondo Grass	*Ophiopogon japonicus*
Muhlygrass	*Muhlenbergia capillaries*
Plumbago	*Plumbago spp.*

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Common Name	Scientific Name
Sage	*Salvia spp.*
Sweet Viburnum	*Viburnum odoratissimum*
Tickseed, Dwarf mouse-ear	*Coreopsis auriculata*

CONIFERS AND CHRISTMAS TREES

Marengo may be used for pre-emergence weed control in conifer nurseries and Christmas tree farms. Marengo may be applied as a directed spray to soil surrounding established plants. Avoid contacting plant stems and leaves with the directed spray solution as injury may occur. Established plants are transplants that are actively growing and where the soil has settled. Do not apply to seedlings or seedling beds. Apply 7.5-15.5 fl oz of Marengo per acre for these uses. Do not exceed 18.5 fl oz of Marengo per acre in a growing season.

Marengo may be tank-mixed with products containing the following active ingredients labeled for use in conifers: glyphosate or glufosinate (FINALE). Do not apply tank-mixes of Marengo with these active ingredients to conifer and Christmas tree foliage. Follow use restrictions on all labels.

NON-SELECTIVE USES

HARDSCAPES

Marengo may be used to maintain bare ground in non-crop areas. These include but are not limited to gravel rocky or sandy areas. All weeds and debris should be removed from these areas to be treated for optimum control. Observe all restrictions and tolerances for applications of Marengo around ornamentals listed on this label.

Apply 9 - 18.5 fl oz of Marengo per acre with uniform coverage to target area. Use a minimum spray volume of 10-20 gallons per acre.

If weeds are present at the time of application, tank-mix a post-emergent herbicide such as glyphosate or Finale with Marengo. Observe all use restrictions on this label and on the label of the tank-mix partner. Adequate irrigation or rainfall after application of Marengo will provide maximum weed control.

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. Marengo may injure the foliage of ornamentals; prevent spray from contacting foliage. Make applications to these sites during clean up, sanitation and preparation prior to plant production. Apply 9 - 18.5 fl oz product per acre with uniform coverage to target area. Use a minimum spray volume of 20 gallons per acre.

If weeds are present at the time of application, tank-mix a post-emergent herbicide such as Finale with Marengo. Observe all use restrictions on this label and on the label of the tank-mix partner. Water in Marengo after application and allow applied surface to dry prior to introducing plants. For outdoor applications, containers can be moved onto the treated ground bed areas after irrigation or rainfall and once the treated surface has dried.

Do not mix with products containing chlorine bleach products. When tank mixing with other products, it is the responsibility of the end-user/applicator to ensure that the tank-mix partner is registered in the state for the application being made.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Store in original container only. Store in a manner to prevent cross-contamination of other pesticides, fertilizer, food, and feed. Do not store in or around the home. Store in a dry, locked storage area.

PESTICIDE DISPOSAL

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

CONTAINER HANDLING

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. 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 ¼ 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 puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Bayer CropScience LP. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

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Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709

Bayer

GROUP 29 HERBICIDE

Marengo®

DO NOT USE FOR THE MANUFACTURING OF FERTILIZER

ACTIVE INGREDIENT:
Indaziflam.....7.4%
OTHER INGREDIENTS:.....92.6%
Total 100.0%
Contains 0.622 lbs active ingredient per gallon

KEEP OUT OF REACH OF CHILDREN

EPA Reg. No. 432-1518

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

FIRST AID

If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
If in eyes:	• Hold eyes open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.

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

Net Contents
64 Fl Oz (1.9 L)
84967874
84919667A 160211AV3

See attached leaflet for complete First Aid Instructions, Precautionary Statements, Directions for Use and Storage and Disposal Instructions.

PULL HERE TO OPEN

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean watermark. Do not contaminate water when disposing of equipment rinsate or washwater. This product may enter water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential for getting into water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

This product may enter water through drift of spray in wind. Follow precautions for use to avoid wind spray drift.

Surface Water Advisory: This pesticide may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Store in original container only. Store in a manner to prevent cross-contamination of other pesticides, fertilizer, food, and feed. Do not store in or around the home. Store in a dry, locked storage area.

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