



# MARENGO<sup>®</sup>

## Herbicide

Preemergence Herbicide for the Control of Grasses, Annual Sedges and Broadleaf Weeds in Production Ornamentals, Hedgerows, Conifers, Christmas Trees, Greenhouse Floors, Ornamental Production Sites, and Hardscapes

**DO NOT USE FOR THE MANUFACTURING OF FERTILIZER**

**ACTIVE INGREDIENT:**

Indaziflam.....7.4%

**OTHER INGREDIENTS:**.....92.6%

**TOTAL:**.....100.0%

This product is a Suspension Concentrate containing 0.622 lb active ingredient per gallon.

**Shake well before use.**

EPA Reg. No. 101563-206 EPA Est. No.

## KEEP OUT OF REACH OF CHILDREN

For **MEDICAL** and **TRANSPORTATION** Emergencies

**ONLY Call 24 Hours A Day 1-800-424-9300**

For **PRODUCT USE** Information Call 1-800-331-2867

See Back Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

**86729148**

**86760231D 221216AV1**

**Net Contents**

**64 Fl Oz (1.9 L)**

## FIRST AID

<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eyes open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><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>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>Have the product container or label with you when calling a poison control center or doctor or going for treatment.</b>	

## PRECAUTIONARY STATEMENTS

### 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 spray drift. Follow precautions for use to avoid 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 HERBICIDE is a selective, preemergence alkylazine herbicide. MARENGO HERBICIDE provides extended residual control of many annual grasses including crabgrass, goosegrass, and annual bluegrass, as well as annual sedges and many broadleaf weeds. Use sites include production nurseries, including field and container grown ornamentals; conifers and Christmas trees; non-bearing fruit and nut trees in nurseries; greenhouse floors; ornamental production facilities (including shadehouses, hoopouses, lathhouses); and hardscapes. MARENGO HERBICIDE also demonstrates early postemergence activity against some weeds, including annual bluegrass, crabgrass and oxalis.

MARENGO HERBICIDE 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 or at bud break of sensitive plants. MARENGO HERBICIDE does not control plants emerging from tubers, rhizomes, bulbs, corms, or existing rootstocks.

MARENGO HERBICIDE needs to be activated by rainfall or irrigation prior to weed germination for

most effective preemergence control.

MARENGO HERBICIDE is a highly active herbicide that provides effective weed control when applied to the soil around many labeled ornamentals. MARENGO HERBICIDE may damage sensitive plants, if the product is allowed to remain in contact with foliage. Carefully apply MARENGO HERBICIDE in strict accordance to the label.

### **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 HERBICIDE 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 HERBICIDE is used on production nurseries, and non-crop areas.
- Do not apply MARENGO HERBICIDE through an irrigation or chemigation system.
- Do not apply MARENGO HERBICIDE by air.
- MARENGO HERBICIDE is not for sale, distribution, or use in Nassau County or Suffolk County in New York State.

### **DEACTIVATING MARENGO HERBICIDE**

Activated charcoal has been shown to deactivate MARENGO HERBICIDE if applied within several hours of application. 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 must 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 HERBICIDE 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**

Make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation.

Apply MARENGO HERBICIDE around 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 HERBICIDE 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.

### **APPLICATION INFORMATION**

Apply MARENGO HERBICIDE 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 and overlapping application patterns to avoid plant injury.

#### **Application Volume**

Apply MARENGO HERBICIDE 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.

### **SOIL MOISTURE, IRRIGATION, AND RAINFALL AFTER APPLICATION**

To activate MARENGO HERBICIDE, irrigate lightly after application to move the herbicide into the soil. Rainfall within several days after application will negate the need to irrigate. Avoid application to saturated soil. Postpone application if rainfall that may cause visible run-off is anticipated.

### **TANK-MIX COMBINATIONS WITH MARENGO HERBICIDE**

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

### **MIXING AND COMPATIBILITY**

#### **Mixing Instructions**

Add MARENGO HERBICIDE to the tank and agitate before adding another product. Mix the amount of MARENGO HERBICIDE needed for immediate application needs. Settling can occur if the spray mixture is allowed to sit over an extended period of time. MARENGO HERBICIDE 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 HERBICIDE is compatible with many pesticides and liquid fertilizers. A compatibility test must be conducted with any potential tank-mix partner with MARENGO HERBICIDE. 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 HERBICIDE\*, (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 HERBICIDE.

**\*Note that a labeled spray rate for MARENGO HERBICIDE must 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 HERBICIDE **must be cleaned prior to use on sensitive ornamentals, or injury may result.** Before and after using MARENGO HERBICIDE, triple rinse all mixing and spray equipment, including tanks, pumps, lines, filters, screens, and nozzles with a tank cleaner.

### **RESISTANCE MANAGEMENT**

For resistance management, MARENGO HERBICIDE contains a Group 29 herbicide (cellulose biosynthesis inhibitor). While no known resistance to MARENGO HERBICIDE exists, any weed population may contain or develop plants naturally resistant to this product and other Group 29 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed. To delay herbicide resistance take one or more of the following steps:

- Rotate the use of MARENGO HERBICIDE or other Group 29 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use, and that considers mechanical control methods, cultural (e.g., timing to favor the turf and not the weeds), biological (weed-competitive varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: 1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; 2) a spreading patch of non-controlled plants of a particular weed species; 3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other areas by cleaning equipment.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific weed biotypes.
- For further information or to report suspected resistance contact Environmental Science U.S., LLC at 1-866-992-2937. You can also contact your pesticide distributor or university extension specialist to report resistance.

**Weeds Controlled or Suppressed by MARENGO HERBICIDE<sup>2</sup>**

<b>Broadleaf Weeds</b>	
American black nightshade	<i>Solanum americanum</i>
American burnweed (Fireweed)	<i>Erechtites hieraciifolia</i>
Beggarticks	<i>Bidens alba</i>
Bittercress	<i>Cardamine</i> spp.
Black medic <sup>1</sup>	<i>Medicago lupulina</i>
Buckwheat, Wild	<i>Polygonum convolvulus</i>
California burclover	<i>Medicago polymorpha</i>
Canada thistle, Common	<i>Cirsium arvense</i>
Chamberbitter	<i>Phyllanthus urinaria</i>
Chickweed, Common	<i>Stellaria media</i>
Chickweed, Mouse-ear	<i>Cerastium vulgatum</i>
Clover, White	<i>Trifolium repens</i>
Corn speedwell	<i>Veronica arvensis</i>
Cudweed, Linear-leaf/Purple	<i>Gnaphalium purpureum</i>
Cupid's shaving brush	<i>Emilia fosbergii</i>
Curly dock	<i>Rumex crispus</i>
Dandelion, Cat's Ear	<i>Hypochoeris radicata</i>
Dandelion, Common	<i>Taraxacum officinale</i>
Dodder*	<i>Cuscuta</i> spp.
Dogfennel	<i>Eupatorium capillifolium</i>
Eclipta	<i>Eclipta alba</i>
Evening primrose, Common	<i>Oenothera biennis</i>
Evening primrose, Cutleaf	<i>Oenothera laciniata</i>
False chamomile <sup>1</sup>	<i>Matricaria maritima</i>
Filaree, Redstem	<i>Erodium cicutarium</i>
Florida pusley	<i>Richardia scabra</i>
Galinsoga	<i>Galinsoga parviflora</i>
Garden spurge	<i>Chamaesyce hirta</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Hairy fleabane	<i>Erigeron bonariensis</i>
Hairy nightshade	<i>Solanum sarrachoides</i>
Henbit	<i>Lamium amplexicaule</i>
Horseweed/ Marestalk	<i>Conyza canadensis</i>
Kochia	<i>Kochia scoparia</i>

**Weeds Controlled or Suppressed by MARENGO HERBICIDE<sup>2</sup> (continued)**

<b>Broadleaf Weeds</b>	
Lambsquarters, Common	<i>Chenopodium album</i>
Lawn burweed	<i>Soliva sessilis</i>
Little mallow	<i>Malva parviflora</i>
London rocket <sup>1</sup>	<i>Sisymbrium irio</i>
Longstalked phyllanthus	<i>Phyllanthus tenellus</i>
Mustard, Black <sup>1</sup>	<i>Brassica nigra</i>
Mustard, Short-pod	<i>Hirschfeldia incana</i>
Mustard, Wild	<i>Sinapis arvensis</i>
Parthenium	<i>Parthenium hysterophorus</i>
Pigweed, Prostrate	<i>Amaranthus blitoides</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Pink purslane	<i>Claytonia sibirica</i>
Plantain, Buckhorn	<i>Plantago lanceolata</i>
Plantain, Paleseed	<i>Plantago virginica</i>
Poinsettia, Wild	<i>Euphorbia cyathophora</i>
Prostrate knotweed	<i>Polygonum aviculare</i>
Prostrate spurge	<i>Euphorbia maculata</i>
Puncturevine	<i>Tribulus terrestris</i>
Purslane, Common	<i>Portulaca oleracea</i>
Ragweed, Common <sup>1</sup>	<i>Ambrosia artimisiifolia</i>
Redmaids	<i>Calandrinia ciliata</i>
Sesbania, Hemp <sup>1</sup>	<i>Sesbania exaltata</i>
Shepherd's-purse	<i>Capsella bursa-pastoris</i>
Sida, Prickly/Teaweed <sup>1</sup>	<i>Sida spinosa</i>
Southern brassbuttons <sup>1</sup>	<i>Cotula australis</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>
Spurge, Spotted	<i>Euphorbia maculata</i>
Stinkwort	<i>Dittrichia graveolens</i>
Sunflower <sup>1</sup> , Common	<i>Helianthus annuus</i>
Swinecress	<i>Coronopus didymus</i>
Tassel flower	<i>Emilia sonchifolia</i>
Tropic ageratum	<i>Ageratum conyzoides</i>
Velvetleaf <sup>1</sup>	<i>Abutilon theophrasti</i>
Vetch, Purple	<i>Vicia benghalensis</i>



**Weeds Controlled or Suppressed by MARENGO HERBICIDE<sup>2</sup> (continued)**

<b>Broadleaf Weeds</b>	
Wild carrot <sup>1</sup>	<i>Daucus carota</i>
Willowherb	<i>Epilobium brachycarpum</i>
Woodsorrel, Yellow <sup>1</sup>	<i>Oxalis stricta</i>
<b>GRASSES, MONOCOTS, AND SEDGES</b>	
Annual bluegrass	<i>Poa annua</i>
Annual kyllinga <sup>3</sup>	<i>Cyperus sesquiflorus</i>
Barnyardgrass, Common	<i>Echinochloa crus-galli</i>
Cheatgrass	<i>Bromus secalinus</i>
Crabgrass, Blanket	<i>Digitaria serotina</i>
Crabgrass, Henry	<i>Digitaria ciliaris</i>
Crabgrass, Large/Hairy	<i>Digitaria sanguinalis</i>
Crabgrass, Smooth	<i>Digitaria ischaemum</i>
Doveweed	<i>Murdannia nudiflora</i>
Fall panicum	<i>Panicum dichotomiflorum</i>
Foxtail brome	<i>Bromus rubens</i>
Foxtail, Giant	<i>Setaria faberi</i>
Foxtail, Green	<i>Setaria viridis</i>
Foxtail, Yellow	<i>Pennisetum glaucum</i>
Goosegrass	<i>Eleusine indica</i>
Guineagrass	<i>Panicum maximum</i>
Kyllinga, Fragrant/Annual <sup>3</sup>	<i>Kyllinga odorata</i>
Little barley	<i>Hordium pusillum</i>
Mouse barley	<i>Hordeum murinum</i>
Red brome	<i>Bromus rubens</i>
Rice flatsedge <sup>3</sup>	<i>Cyperus iria</i>
Ryegrass, Italian	<i>Lolium multiflorum</i>
Ryegrass, Perennial	<i>Lolium perenne</i>
Sandbur	<i>Cenchrus longispinus</i>
Sedge, Annual <sup>3</sup>	<i>Cyperus compressus</i>
Sedge, Globe <sup>3</sup>	<i>Cyperus croceus</i>
Tufted lovegrass	<i>Eragrostis pectinacea</i>

\*Not for use in California

<sup>1</sup> Weeds suppressed by MARENGO HERBICIDE

(continued)

(continued)

<sup>2</sup> Use higher labeled rates if weed pressure is historically high or longer residual control is desired. Weed control can also be achieved with multiple applications of MARENGO HERBICIDE. Do not exceed a total of 18.5 fl oz per acre per year.

<sup>3</sup> MARENGO HERBICIDE 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 HERBICIDE may be applied for preemergence weed control in ornamentals, hedgerows, production ornamentals in outdoor nurseries, shadehouses, hoopouses, Christmas trees, and conifer plantations. Apply MARENGO HERBICIDE 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 HERBICIDE to established ornamentals.

### **USE RESTRICTIONS**

- Do not exceed the maximum single application rates specified for each ornamental use.
- Do not allow spray to contact foliage of desirable plant(s). MARENGO HERBICIDE may cause localized injury to the foliage, especially young leaf tissue. If the spray contacts the foliage, wash off immediately. See specific label instructions for over-the-top applications.
- Do not use MARENGO HERBICIDE on or around annuals not listed as tolerant on this label. In areas where bedding plants may be seeded, wait a minimum of one year after application.
- Do not use MARENGO HERBICIDE around bearing fruit and nut trees. MARENGO HERBICIDE may be used around non-bearing fruit and nut trees. Non-bearing trees are defined as trees that will not bear fruit until at least 1 year after treatment.
- Do not use MARENGO HERBICIDE around non-bearing fruit and nut trees unless they are at least 1 year old (citrus), 5 years old (grape vines) and 3 years old (all others).
- Do not use MARENGO HERBICIDE within the dripline of bearing fruit and nut trees.
- Do not incorporate MARENGO HERBICIDE into soil or potting mix.
- Do not cultivate or disturb the soil surface after application of MARENGO HERBICIDE as this may reduce weed control.
- If transplanting mature plants listed as tolerant on this label into soil treated with MARENGO HERBICIDE within the preceding 12 months, replace existing soil around roots to minimize effects on plant establishment.
- Do not apply MARENGO HERBICIDE directly to ornamentals being grown in a greenhouse.
- Do not use MARENGO HERBICIDE on nursery seedbeds, rooted cuttings or young plants in liners.
- Do not apply MARENGO HERBICIDE to ornamentals growing in containers smaller than 15 gallons.
- Do not apply MARENGO HERBICIDE over-the-top to landscape ornamentals. For Natural Areas and Production Ornamental Uses, see label instructions for over-the-top applications.
- Do not mix with products containing chlorine bleach.
- Do not apply to landscape beds uphill from ryegrass, fescue, bentgrass, or mixed lawns where these grasses are desirable.

### **USE PRECAUTIONS**

- Avoid applying MARENGO HERBICIDE to heavily mulched beds, as reduced weed control may occur. For best results remove existing mulch and replace mulch after an application of MARENGO HERBICIDE.

- Application of MARENGO HERBICIDE to budded grafts or graft unions may cause plant injury or plant death.

#### **USE OF MARENGO HERBICIDE ON ORNAMENTALS IN COARSE AND SANDY SOILS**

Soil conditions can affect the tolerance of ornamentals to MARENGO HERBICIDE. Excessively coarse or sandy soils may allow for downward movement of MARENGO HERBICIDE into the root zone and cause significant root damage and phytotoxicity. Coarse soils may include significant quantities of sand, gravel, decomposed granite, and ground cinders. Prior to application of MARENGO HERBICIDE on these soils, confirm soil texture with a soil test. Ornamentals grown in soil exceeding 90% sand or 20% gravel may be at risk. If MARENGO HERBICIDE is to be applied in these soils, evaluate tolerance of a few plants of each ornamental in MARENGO HERBICIDE treated soil for 1-2 months prior to a large scale application.

#### **SYMPTOMS OF MARENGO HERBICIDE INJURY ON ORNAMENTALS**

MARENGO HERBICIDE may injure sensitive ornamentals by damaging roots or leaves. Plant foliage damaged by root absorption will appear stunted, deformed, and may not recover. If MARENGO HERBICIDE 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.

#### **Use of MARENGO HERBICIDE near Sensitive Grasses**

**CAUTION:** MARENGO HERBICIDE applied uphill to sensitive grasses can move, under certain circumstances, to sensitive grasses and cause injury and stand reduction.

#### **PRODUCTION ORNAMENTAL USES**

MARENGO HERBICIDE provides up to 8 months of weed control with a single application. The length of control depends on many environmental factors as well as the target weeds and the weed pressure. Apply MARENGO HERBICIDE as a directed spray to the soil surface around established plants. To avoid root damage, apply MARENGO HERBICIDE around well established transplants and when the soil has firmly settled. Irrigation or rainfall will help to settle the soil and seal surface cracks. Apply MARENGO HERBICIDE around dormant plants. If applied near actively growing plants, avoid contact to expanding buds or new leaves. Apply MARENGO HERBICIDE 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 HERBICIDE to deciduous foliage or green bark may result in unacceptable injury.

**AMOUNT TO USE:** Apply MARENGO HERBICIDE as a broadcast, directed spray at 7.5 - 15.5 fl oz of MARENGO HERBICIDE per acre (0.17 - 0.36 fl oz per 1,000 sq ft) around ornamentals in 40 - 100 gallons of water per acre (1 - 2.3 gallons of water per 1,000 sq ft).

A subsequent application of MARENGO HERBICIDE can be made within 90 days after the initial application provided that the total MARENGO HERBICIDE applied does not exceed 18.5 fl oz per acre in a 12-month period.

#### **COMBINATIONS OF MARENGO HERBICIDE WITH NON-SELECTIVE HERBICIDES AROUND ORNAMENTALS**

Remove existing weed growth before application of MARENGO HERBICIDE or use a postemergence herbicide labeled for control. MARENGO HERBICIDE may be used in combination with a non-selective herbicide. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of turfgrasses, trees, shrubs, or other desirable vegetation. 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.

**IMPORTANT:** Direct application of MARENGO HERBICIDE to the soil surface. Avoid direct spray contact on plant surfaces, foliage, and green bark. Avoid application under environmental

conditions that favor drift to non-targeted areas. Deep cultivation reduces the effectiveness of MARENGO HERBICIDE.

**BACKPACK AND HANDHELD SPRAYER MIXING:** MARENGO HERBICIDE can be applied using backpack or handheld sprayers. For backpack or handheld spray applications, mix 1 teaspoon of MARENGO HERBICIDE per gallon of water. Agitate the mixture to ensure good suspension. If adding glyphosate, mix MARENGO HERBICIDE in first. Recommended spray volume is 40 - 100 gallons per acre or approximately 1 - 2.3 gallon per 1000 sq ft.

### **ORNAMENTALS TOLERANT TO OVER-THE-TOP APPLICATIONS OF MARENGO HERBICIDE**

MARENGO HERBICIDE may be applied by over-the-top application to the following tolerant ornamental species in a nursery setting. Calibrate spray equipment to deliver the correct amount as accurate applications are critical to avoid plant injury. Do not exceed 9 oz MARENGO HERBICIDE per acre (0.2 oz MARENGO HERBICIDE per 1,000 sq. ft.). Recommended spray volume is 40 - 100 gallons of water per acre or approximately 1 - 2.3 gallons per 1,000 sq. ft. Soil must be firmly settled around the root area prior to herbicide application. Do not apply at bud emergence or through candle stage. Activate MARENGO HERBICIDE by watering in with light irrigation or rainfall prior to weed germination for most effective preemergence weed control. If a desired plant is not listed below, treat several plants at the maximum use rate and evaluate 1 - 2 months later for acceptable tolerance. The user assumes responsibility for application to plants not listed on this label.

<b>Common Name</b>	<b>Scientific Name</b>
Arborvitae*	<i>Thuja occidentalis</i>
Cedar, Incense	<i>Calocedrus decurrens</i>
Fir, Douglas	<i>Pseudotsuga menziesii</i>
Fir, Nordmann*	<i>Abies nordmanniana</i>
Pine, Loblolly*	<i>Pinus taeda</i>
Pine, Longleaf*	<i>Pinus palustris</i>
Pine, Ponderosa	<i>Pinus ponderosa</i>
Pine, Shortleaf*	<i>Pinus echinata</i>
Pine, Slash*	<i>Pinus elliottii</i>
Pine, Sugar	<i>Pinus lambertiana</i>
Redwood, Coast	<i>Sequoia sempervirens</i>
Spruce, Colorado blue*	<i>Picea pungens</i>

\*Not for use in California

### **ORNAMENTALS AND THEIR CULTIVARS TOLERANT TO MARENGO HERBICIDE**

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

<b>Common Name</b>	<b>Scientific Name</b>	<b>Cultivar</b>
Acacia, Prostrate	<i>Acacia redolens</i>	Desert Carpet
Anise, Yellow	<i>Illicium parviflorum</i>	
Apple	<i>Malus domestica</i>	Beverly Hills, Ellsa, Golden Dorsett, Harelred, Honey Crisp, Mahaleb, Red Delicious, Winesap
Apricot	<i>Prunus armeniaca</i>	Tropic Gold
Arborvitae	<i>Thuja occidentalis</i>	Emerald, Green Giant, Green Flag, Nigra, Techny, Yellow Ribbon
Ash, (Southern) Green	<i>Fraxinus pennsylvanica</i>	Georgia Gem
Asparagus fern	<i>Asparagus plumosus</i>	
Aspen, Quaking	<i>Populus tremuloides</i>	
Azalea	<i>Rhododendron</i> spp.	Delaware Valley White, Fashion, Florida Flame, Girard's Rose, Haps Pink, High Tide, Judge Solomon, Karen, Nova Zembla, Macarantha, Hino Crimson, Mother's Day, Pink Gumpo, Red Ruffle, VF 14, White Gumpo
Azalea, Cat album	<i>Rhododendron chionoides</i>	
Azalea, Encore	<i>Rhododendron</i> spp.	Autumn Debutante
Birch, River	<i>Betula nigra</i>	Heritage
Birch, White	<i>Betula platyphylla</i>	Spire
Bird of Paradise	<i>Strelitzia reginae</i>	
Bird of Paradise, White	<i>Strelitzia nicolai</i>	
Bluebird	<i>Caryopteris x clandonensis</i>	Dark Knight
Bluestem, Big	<i>Andropogon gerardii</i>	
Bluestem, Little	<i>Andropogon scoparius</i>	
Boxwood	<i>Buxus microphylla</i>	Baby Gem, Green Beauty
Boxwood	<i>Buxus isinica</i> var. <i>insularis</i>	Wintergreen
Boxwood, Common/ English	<i>Buxus sempervirens</i>	Green Gem, Green Mountain, Suffructicosa, Winter Gem
Boxwood, Japanese	<i>Buxus microphylla</i> var. <i>japonica</i>	Dwarf, Chicagoland
Buckeye, Ohio	<i>Aesculus glabra</i>	
Burning bush (Euonymus)	<i>Euonymus altus</i>	Compacta

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Common Name	Scientific Name	Cultivar
Butterfly bush	<i>Buddleia davidii</i>	Nanho Blue
Buttonwood	<i>Conocarpus erectus</i>	
Camellia, Japanese	<i>Camellia japonica</i>	Margaret Heathcliff Pink
Camellia, Little leaf	<i>Camellia sasanqua</i>	Cleopatra Pink, Shi Shi Gashira
Cedar, Atlantic white	<i>Chamaecyparis thyoides</i>	
Cedar, Eastern red	<i>Juniperus virginiana</i>	Burkii, Idyllwild
Cedar, Japanese	<i>Cryptomeria japonica</i>	Black Dragon, Burkii, Globosa, Yoshino
Cherry Laurel (Skip laurel)	<i>Prunus laurocerasis</i>	Otto Luyken, Schipkaensis
Chokeberry	<i>Aronia prunifolia</i>	Viking
Crabapple	<i>Malus sylvestris</i>	Harvest Gold, Snowdrift, Snow Spring, Spring Snow
Crape myrtle	<i>Lagerstroemia indica</i>	Burgundy Cotton, Pocomoke Pink, Sarah's Favorite, Siren Red
Crape myrtle	<i>Lagerstroemia indica x fauriei</i>	Miami, Muskogee, Tuscarora
Cryptomeria	<i>Cryptomeria japonica</i>	Black Dragon, Yoshino
Cypress, Bald	<i>Taxodium distichum</i>	Shawnee Brave
Cypress, False	<i>Chamaecyparis</i> spp.	Gold Mops, Gold Thread
Cypress, Japanese (Hinoki cypress)	<i>Chamaecyparis obtusa</i>	Filicoides
Cypress, Leyland	<i>Cupressus x leylandii</i>	
Cypress, Mediterranean	<i>Cupressus sempervirens</i>	
Cypress, Pond	<i>Taxodium distichum</i> var. <i>imbricatum</i>	
Daphne	<i>Daphne caucasica</i>	Summer Ice
Dawn Redwood	<i>Metasequoia glyptostroboides</i>	
Dogwood, Flowering	<i>Cornus florida</i>	
Dogwood, Kousa	<i>Cornus kousa</i>	
Dogwood, Redosier (Red bark)	<i>Cornus sericea</i>	Yellow Twig
Dogwood, Tatarian	<i>Cornus alba</i>	
Elm, American	<i>Ulmus americana</i>	
Elm, Chinese (Bosque)	<i>Ulmus parvifolia</i>	Drake
Eucalyptus	<i>Eucalyptus globulus</i>	Baby Tears
Feather reed grass	<i>Calamagrostis x acutiflora</i>	Overdam, Karl Foerster
Fir, Frasier	<i>Abies fraseri</i>	

(continued)

Common Name	Scientific Name	Cultivar
Florida Leucothe (Pipestem)	<i>Leucothoe populifolia</i>	
Forsythia (Golden bells)	<i>Forsythia x intermedia</i>	Lynwood (Lynwood Gold)
Fragrant tea olive	<i>Osmanthus fragrans</i>	
Gardenia	<i>Gardenia radicans</i>	
Gardenia	<i>Gardenia jasminoides</i>	Frostproof, Mystery
Gaura	<i>Gaura lindheimeri</i>	Pink Fountain
Ginkgo	<i>Ginkgo biloba</i>	
Gold-dust plant	<i>Aucuba japonica</i>	Gold Dust
Green ash	<i>Fraxinus pennsylvanica</i>	Georgia Gem
Gumbo-limbo (Copperwood)	<i>Bursera simaruba</i>	
Hardy Kiwi	<i>Actinidia arguta</i>	Anna
Hawthorn, One seeded	<i>Crataegus monogyna</i>	Winter King
Hemlock, Eastern	<i>Tsuga canadensis</i>	
Hibiscus, Chinese	<i>Hibiscus rosa-sinensis</i>	President Red, San Diego Red
Holly, American	<i>Ilex opaca</i>	
Holly, Chinese	<i>Ilex cornuta</i>	Burfordii Nana, Carissa, Dwarf Burford, Needlepoint
Holly, Dragon lady	<i>Ilex x aquipernyi</i>	Dragon Lady
Holly, Dwarf yaupon	<i>Ilex vomitoria</i>	Schillings, Stoke's Dwarf
Holly, Foster	<i>Ilex x attenuata</i>	East Palatka, Fosteri
Holly, Inkberry/Gallberry	<i>Ilex glabra</i>	Compacta, Densa, Shamrock
Holly, Japanese	<i>Ilex crenata</i>	Compacta, Green Luster, Sky Pencil, Soft Touch
Holly, Meservae	<i>Ilex meserveae</i>	Blue Maid, Blue Princess
Holly, Nellie R. Stevens	<i>Ilex aquifolium x Ilex cornuta</i>	Nellie R. Stevens
Holly, Winterberry	<i>Ilex verticillata</i>	Jim Dandy, Red Sprite
Honeylocust	<i>Gleditsia triacanthos</i>	Sunshine
Hornbeam, European	<i>Carpinus betulus</i>	Frans Fontaine
Hornbeam, Hop	<i>Ostrya virginiana</i>	Carolina
Indian Hawthorn	<i>Rhaphiolepis indica</i>	Dwarf Pink, Minor, Pink Lady
Japanese cleyera	<i>Ternstroemia gymnanthera</i>	
Jasmine, Asiatic/ Yellow star	<i>Trachelospermum asiaticum</i>	Minima

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<b>Common Name</b>	<b>Scientific Name</b>	<b>Cultivar</b>
Jasmine, Winter	<i>Jasminum nudiflorum</i>	
Juniper, Chinese	<i>Juniperus chinensis</i>	Gold Tip, Grey Owl, Sea Green, Spartan
Juniper, Common	<i>Juniperus communis</i>	
Juniper, Creeping	<i>Juniperus horizontalis</i>	Bar Harbor, Blue Rug
Juniper, Flaky	<i>Juniperus squamata</i>	Blue Star
Juniper, Parson's	<i>Juniperus davurica</i>	Expansa, Parsonii
Juniper, Shore	<i>Juniperus conferta</i>	Blue Pacific
Juniper (Red Cedar)	<i>Juniperus virginiana</i>	Brodie, Burkii
Lantana	<i>Lantana camara</i>	Landmark Sunrise Rose
Larch, Common	<i>Larix decidua</i>	
Laurustinus	<i>Viburnum tinus</i>	
Lilac	<i>Syringa x 'Penda'</i>	Bloomerang
Lilac, Common	<i>Syringa vulgaris</i>	
Liriope (Lilyturf)	<i>Liriope muscari</i>	Aztec Grass, Big Blue, Evergreen Giant, Silvery Sunproof
London plane tree	<i>Platanus x acerifolia</i>	Exclamation
Loropetalum	<i>Loropetalum chinensis</i>	Burgundy, Emerald Snow, Plum Purple, Rubra, Ruby
Maiden Grass (Eulaliagrass)	<i>Miscanthus sinensis</i>	Gracillimus, Zebrinus, Little Zebra
Magnolia, Jane	<i>Magnolia liliflora x M. stellata</i>	
Magnolia, Southern	<i>Magnolia grandiflora</i>	Bracken's Brown Beauty
Mahogany, West Indies/ American	<i>Swietenia mahagoni</i>	
Maple, Autumn blaze	<i>Acer x freemanii</i>	Jeffersred
Maple, Japanese	<i>Acer palmatum</i>	Bloodgood, Weeping Red Dragon
Maple, Red	<i>Acer rubrum</i>	Autumn Blaze, Autumn Radiance, Frank's Red, October Glory, Red Sunset
Mondograss	<i>Ophiopogon japonicus</i>	
Muhly Grass	<i>Muhlenbergia capillaris</i>	
Nandina	<i>Nandina domestica</i>	Firepower
Oak, Northern pin	<i>Quercus ellipsoidal</i>	

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<b>Common Name</b>	<b>Scientific Name</b>	<b>Cultivar</b>
Oak, Northern red	<i>Quercus rubra</i>	
Oak, Nuttall	<i>Quercus nuttallii</i>	
Oak, Pin	<i>Quercus palustris</i>	
Oak, Prairie stature	<i>Quercus x bimundorum</i>	Midwest
Oak, Shumard	<i>Quercus shumardii</i>	
Oak, Southern live	<i>Quercus virginiana</i>	Cathedral
Oak, White	<i>Quercus alba</i>	Swamp White
Ohio buckeye	<i>Aesculus glabra</i>	
Orchid Tree, Hong Kong	<i>Bauhinia blakeana</i>	
Palm, Bamboo/Reed	<i>Chamaedorea seifrizzi</i>	
Palm, Cat	<i>Chamaedorea cata-ractarum</i>	
Palm, Chinese Fan	<i>Livistona chinensis</i>	
Palm, Christmas	<i>Adonidia merrillii</i>	
Palm, Areca	<i>Dypsis lutescens</i>	
Palm, Coconut	<i>Cocos nucifera</i>	
Palm, European (Mediterranean) fan	<i>Chamerops humilis</i>	
Palm, Foxtail	<i>Wodyetia bifurcata</i>	
Palm, Majesty	<i>Ravenea rivularis</i>	
Palm, Pygmy date	<i>Phoenix roebelenii</i>	
Palm, Queen	<i>Syagrus romanzoffiana</i>	
Palm, Roebelenii	<i>Phoenix roebelenii</i>	
Palm, Royal	<i>Roystonea regia</i>	
Palm, Triangle	<i>Dypsis decaryi</i>	
Palm, King Sago	<i>Cycas revoluta</i>	
Pear, Callery	<i>Pyrus calleryana</i>	Bradford Pear, Chanticleer
Pieris (Lily-of-the-Valley shrub, Japanese andromeda)	<i>Pieris japonica</i>	Mountain Fire, Red Mill, Shojo
Pine, Black	<i>Pinus nigra</i>	
Pine, Eastern white	<i>Pinus strobus</i>	
Pine, Scots	<i>Pinus sylvestris</i>	
Pittosporum (Japanese Pittosporum)	<i>Pittosporum tobira</i>	Variegata
Pistache, Texas	<i>Pistacia texana</i>	

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Common Name	Scientific Name	Cultivar
Plum, American	<i>Prunus americana</i>	
Plum, Crimson pointe	<i>Prunus x cerasifera</i>	
Podocarpus (Buddhist pine)	<i>Podocarpus macrophyllum</i>	
Prairie Cordgrass	<i>Spartina pectinata</i>	
Privet	<i>Ligustrum ovatifolium</i>	
Privet, Vicary	<i>Ligustrum x vicary</i>	
Redbud, Eastern	<i>Cercis canadensis</i>	MN Strain
Rhododendron	<i>Rhododendron</i> spp.	
Rose	<i>Rosa</i> spp.	Caramba, Double Knock Out, Flower Carpet Amber, Home Run, Knock Out, Louis Phillipe, Pink Knock Out, Radrazz
Rose	<i>Rosa odorata</i>	Belinda's Dream, Blue Girl, Double Delight, John F. Kennedy, Mister Lincoln
Rose	<i>Rosa wichurana</i>	Dr. Huey
Rose, Virginia	<i>Rosa virginiana</i>	
Rose mallow	<i>Hibiscus moscheutos</i>	
Rose of Sharon	<i>Hibiscus syriacus</i>	Pink Heart, Boule de Feu
Russian sage	<i>Perovskia atriplicifolia</i>	
Seagrape	<i>Coccoloba uvifera</i>	
Skip laurel	<i>Prunus laurocerasis</i>	
Snowberry, Common	<i>Symphoricarpos albus</i>	
Spruce, Colorado Blue (Blue spruce)	<i>Picea pungens</i>	
Spruce, Norway	<i>Picea abies</i>	
Sweetgum	<i>Liquidambar styraciflua</i>	Happidaze
Thin-fruit sedge	<i>Carex flaccosperma</i>	
Viburnum, Burkwood	<i>Viburnum x burkwoodii</i>	
Viburnum (Wayfaring Tree)	<i>Viburnum lantana</i>	Mohican
Viburnum, Popcorn (Japanese snowball)	<i>Viburnum plicatum</i>	Popcorn, St. Keverne
Wax myrtle, Southern (w/ woody growth)	<i>Myrica cerifera</i>	
Yellow Indian grass	<i>Sorghastrum nutans</i>	

**Do not use MARENGO HERBICIDE on any of these plants.**

<b>Common Name</b>	<b>Scientific Name</b>
Blue fescue grass	<i>Festuca glauca</i>
Croton	<i>Codiaeum variegatum</i>
Fountain grass	<i>Pennisetum alopecuroides</i>
Fountain grass, Purple	<i>Pennisetum setaceum</i>
Hydrangea	<i>Hydrangea macrophylla</i>
Sweet Viburnum	<i>Viburnum odoratissimum</i>
Viburnum	<i>Viburnum suspensum</i>

**CONIFERS AND CHRISTMAS TREES**

MARENGO HERBICIDE may be used for preemergence weed control in conifer nurseries and Christmas tree farms. MARENGO HERBICIDE may be applied as a directed spray to soil surrounding established plants. 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 HERBICIDE per acre for these uses. Do not exceed 18.5 fl oz of MARENGO HERBICIDE per acre in a growing season.

MARENGO HERBICIDE may be tank-mixed with products containing the following active ingredients labeled for use in conifers: glyphosate or glufosinate ammonium. Follow use restrictions on all labels.

**NON-SELECTIVE USES**

**NON-CROP AREAS**

MARENGO HERBICIDE may be used to maintain bare ground in non-crop areas. These include paths, parking lots, curbs, sidewalks, driveways, around buildings, gravel areas, loading ramps, educational facilities, storage yards, vacant lots, fence rows, parks, and hardscapes. All weeds and debris must be removed from these areas to be treated for optimum control. Adequate irrigation or rainfall after application of MARENGO HERBICIDE will provide maximum weed control.

**Use of MARENGO HERBICIDE near Sensitive Grasses**

MARENGO HERBICIDE applied uphill to sensitive grasses can move, under certain circumstances, to sensitive grasses and cause injury and stand reduction.

**AMOUNT OF USE:** Apply 9 - 18.5 fl oz of MARENGO HERBICIDE per acre. Use a minimum spray volume of 10 gallons per acre.

If weeds are present at the time of application, tank-mix a postemergence herbicide such as glyphosate or glufosinate ammonium with MARENGO HERBICIDE. Observe all use restrictions on this label and on the label of the tank-mix partner.

**ORNAMENTAL PRODUCTION FACILITIES**

MARENGO HERBICIDE may be used in ornamental production facilities such as nurseries, greenhouses, areas covered by landscape fabric, hoopouses, lathhouses and shadehouses to provide bare ground weed control beneath benches, potted plants, or other areas within these facilities where weeds may germinate.

When using MARENGO HERBICIDE to treat floors beneath and around benches, do not allow spray to contact foliage of desirable plant(s). MARENGO HERBICIDE may cause localized injury to the foliage, especially young leaf tissue. If the spray contacts the foliage, wash off immediately. MARENGO HERBICIDE may damage sensitive plants if the product is allowed to remain in contact

with foliage. If present, turn off fans during a MARENCO HERBICIDE application.

**AMOUNT OF USE:** Apply 9 - 18.5 fl oz product per acre. Use a minimum spray volume of 40 gallons per acre.

If weeds are present at the time of application, tank-mix a postemergence herbicide. Observe all use restrictions on this label and on the label of the tank-mix partner. In settings where containers will be placed directly on the treated surface, wait until the treated surface has dried before placement of containerized plants. For best results, water in prior to placement of containerized plants.

## STORAGE AND DISPOSAL

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

### PESTICIDE STORAGE

Store in original container and keep tightly closed when not in use. Store in a cool, dry place. Avoid cross-contamination with other pesticides.

### PESTICIDE DISPOSAL

Pesticides wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or Hazardous Waste representative at the nearest EPA regional office for guidance in proper disposal methods.

### CONTAINER HANDLING

**Rigid Non-refillable Containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)**

Non-refillable container. Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

#### **Bottom Discharge IBC (e.g. - Schuetz Caged IBC or Snyder Square Stackable)**

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

#### **Top Discharge IBC, Drums, Kegs (e.g. - Snyder 120 Next Gen, Bonar B120, Drums, Kegs)**

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

#### **Non-Seed Treatment Products in Non-Refillable Fiber Drums with Liners**

Non-refillable container. Do not reuse or refill this container. Completely empty liner by

*(continued)*

## STORAGE AND DISPOSAL *(continued)*

shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

### **Non-Seed Treatment Products in Non-Refillable Foil outer pouches of Water soluble Packets (WSP)**

Offer foil pouch for recycling if available or dispose of empty pouch in the trash as long as WSP is unbroken.

### **Rigid Non-Refillable containers with capacities smaller or equal to 5 gallons**

#### **PLASTIC CONTAINERS:**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

#### **LIQUID Dillutable formulations:**

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 offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

## 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 Environmental Science U.S., LLC. 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, ENVIRONMENTAL SCIENCE U.S., LLC 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 Environmental Science U.S., LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ENVIRONMENTAL SCIENCE U.S., LLC 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

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## **IMPORTANT: READ BEFORE USE** *(continued)*

EXCEED THE PURCHASE PRICE PAID, OR AT ENVIRONMENTAL SCIENCE U.S., LLC'S ELECTION, THE REPLACEMENT OF PRODUCT.

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**PRODUCED FOR**  
**Environmental Science U.S., LLC**  
**5000 CentreGreen Way, Suite 400**  
**Cary, NC 27513**









# MARENGO<sup>®</sup>

## Herbicide

**ACTIVE INGREDIENT:**

Indaziflam.....7.4%

**OTHER INGREDIENTS:**.....92.6%

**TOTAL:**.....100.0%

This product is a Suspension Concentrate containing 0.622 lb active ingredient per gallon.

Shake well before use.

EPA Reg. No. 101563-206 EPA Est. No.

 For **MEDICAL** and **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-424-9300

 For **PRODUCT USE** Information Call 1-800-331-2867

### KEEP OUT OF REACH OF CHILDREN

### FIRST AID

<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eyes open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <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>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

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

**86729148**
**86760231D 221216AV1**
**Net Contents**
**64 Fl Oz (1.9 L)**

See Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.