SPECIMEN LABEL

GROUP

**27** 

HERBICIDE



### MESO 4 SC SELECT

#### **HERBICIDE**

**Provides Selective and Residual Control of Weeds in Ornamental Turfgrasses** 

Active Ingredient:

Mesotrione: 2-[4-(methylsulfonyl)2-nitrobenzoyl]-1,3-cyclohexanedione 40.0%

Other Ingredients: 60.0%

TOTAL: 100.0%

Contains 4 lbs. Mesotrione per gallon.

# KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
CAUTION

Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing.

SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS, COMPLETE DIRECTIONS FOR USE, & STORAGE AND DISPOSAL.

EPA Reg. No. 89442-33 AD062817



Manufactured For: Prime Source, a division of Albaugh LLC 1525 NE 36th Street Ankeny, IA 50021

FIRST AID	
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF ON SKIN	<ul> <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>

### FIRST AID (cont.)

#### IF INHALED

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

### 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 the poison control center or doctor.
- Do not give anything to an unconscious person.

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

### FIRST AID (cont.)

#### **HOT LINE NUMBER**

For 24-Hour Medical Emergency Assistance (Human or Animal) call: **1-800-222-1222**. For Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) call CHEMTREC: **1-800-424-9300**.

# PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals CAUTION

Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing.

# Personal Protection Equipment (PPE) Applicators and Other Handlers much wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical Resistant gloves (barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC), or Viton)

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.

## **USER SAFETY RECOMMENDATIONS Users should:**

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove and wash contaminated clothing before reuse.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **Engineering Control 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.

#### **Environmental Hazards**

Do not apply directly to water or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

### **Surface Water Advisory**

This product may contaminate water through drift or spray in wind. This product has a high potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce

the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

#### **Physical and Chemical Hazards**

Do not use or store near heat or open flame.

#### **DIRECTIONS FOR USE**

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

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 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 interval. 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.

#### AGRICULTURAL USE REQUIREMENTS (cont.)

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
- shoes plus socks
- chemical resistant gloves (barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, poly-ethylene, polyvinyl chloride (PVC) ≥14 mils, and viton ≥14 mils)

#### 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, 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, and greenhouses.

Do not enter treated areas without protection clothing until sprays have dried.

Meso 4 SC Select is applied pre- and post-emergence to provide selective contact and residual control of turfgrass weeds. If applied pre-emergence, it is absorbed when emerging from the soil. Pre-emergence activity and control is reduced under dry conditions. Activate Meso 4 SC Select with 0.15 inches of irrigation if rain hasn't fallen within 10 days of application. Post-emergent control is obtained by absorption into the soil and contact with foliage. Growth ceases post-application, weeds turn white from chlorophyll loss, and will die within three weeks. Make a repeat application after 2-3 weeks to improve post-emergence weed control. Add a non-ionic surfactant when making post-emergence applications.

Turfgrass color can temporarily become white during treatment. Whitening typically occurs 5-7 days post-application and lasts for several weeks. A second application to the same site will cause less whitening of plant tissue.

Meso 4 SC Select controls weeds prior to and during seeding of certain turfgrasses during turf renovation (see New Seedings). If making pre-emergence application to established turf, tank mix **Meso 4 SC Select** with other pre-emergence herbicides including Barricade® 65WG for longer residual and broad spectrum control.

### **Approved Use Sites**

Meso 4 SC Select can be applied to commercial and residential turfgrasses. Noncrop area use sites include golf courses, sod farms, athletic fields, parks, residential and commercial properties, cemeteries, airports, and lawns.

Apply **Meso 4 SC Select** at reduced rates of 4 fl. oz./A or less if tank mixing with atrazine, bentazon, or simazine. Before tank mixing **Meso 4 SC Select** with other herbicides, conduct a compatibility, safety, and efficacy test before treating larger areas. See tank mix partner labels for directions and precautions. The most restrictive directions apply.

Thoroughly clean application equipment after use to avoid injury to sensitive plants.

To avoid injury to sensitive species, keep traffic out of treated areas until sprays have

dried; irrigate soil lightly to move **Meso 4 SC Select** from turf foliage before resuming normal irrigation.

#### **Turfgrass Use Restrictions:**

- DO NOT overspray or allow spray to drift to ornamentals or flower beds and gardens. Roses and daylilies are particularly sensitive to Meso 4 SC Select.
- DO NOT apply more than 16 oz. (or 0.50 lb. mesotrione per acre per year) per acre per year.
- DO NOT plant any crop other than turfgrass for 18 months post-application of Meso 4 SC Select to avoid turfgrass injury.
- DO NOT apply organophosphate or carbamate insecticides within 7 days of applying Meso 4 SC Select.
- DO NOT apply Meso 4 SC Select through any type of irrigation system.
- DO NOT make aerial applications.
- **DO NOT** use treated clippings to mulch trees or vegetable/flower gardens.
- DO NOT apply this product on Bentgrass,
   Poa annua, kikuyugrass, zoysiagrass,
   seashore paspalum, and bermudagrass;

- plant injury is unacceptable. Maintain a 5-foot buffer between treated areas and bentgrass or *Poa annua* greens.
- DO NOT apply over the top of exposed roots of trees and ornamentals.
- **DO NOT** use on golf course putting greens; maintain a minimum of a 5-foot buffer between putting greens and treated areas.
- DO NOT make broadcast applications on residential lawns for pre- and post-emergent weed control unless the home lawn is being reseeded and/or renovated, as whitening of some turfgrasses may occur.

### **Turfgrass Species**

Species	Application Rate (Fl. Oz. per Acre)
Kentucky bluegrass (Poa pratensis) Centipedegrass (Eremochloa ophiuroides) Buffalograss (Buchloe dactyloides) Tall fescue (Festuca arundinacea)	5-8
Perennial ryegrass* (Lolium perenne) Fine fescue* (creeping red, chewings and hard) Festuca spp.	5
St. Augustinegrass* (grown for sod) ( <i>Steno-taphrum secundatum</i> )	4

<sup>\*</sup>See additional rate instructions below.

#### **RESISTANCE MANAGEMENT**

There is no known resistance to **Meso 4 SC Select** and no known instances of cross-resistance between the active ingredient in **Meso 4 SC Select** (mesotrione, a Group 27 HPPD inhibitor) and other classes of herbicides. Do not apply less than the specified label instructions, and rotate to a herbicide product with a different mode of action to prevent the occurrence of weed resistance if the maximum number of applications and/or rate of product has been met and weeds are not controlled.

#### **APPLICATION INSTRUCTIONS**

### **Pre-Emergence Applications:**

Apply 4-8 fl. oz. of **Meso 4 SC Select** per acre in at least 30 gallons of water per acre before seeds germinate and as close to seed germination as possible. Combine this product with another pre-emergence herbicide including Barricade 65WG for extended control of crabgrass and foxtail.

Pre-Emergence Application Precautions: Meso 4 SC Select is most effective on established turf when applied post-emergence unless it is combined with another soil active herbicide.

### **Pre-Emergence Application Restrictions:**

- **DO NOT** exceed 5 fl. oz. per acre per application to perennial ryegrass, fine fescues, or mixed stands that consist of >50% perennial ryegrass and/or fine fescue.
- St. Augustinegrass sod: **DO NOT** exceed 4 fl. oz. per acre.

Application to New Seedings/New Lawns Apply 5-8 fl. oz. Meso 4 SC Select per acre in at least 30 gallons of water per acre before seeding or after seeding of tolerance turfgrass species listed below, except fine fescue, as application to fine fescue can reduce grass density. Meso 4 SC Select can be effectively used on grass seed blends that contain <20% by weight hard/fine fescue. For optimal control, apply at grass seeding or as close to seeding as possible.

### **New Seedings/New Lawns Restrictions:**

• **DO NOT** spray on newly germinated turfgrass. Delay treatment until grass has been mowed 2-4 times and/or 4 weeks after emergence (whichever is longer).

Post-Emergence Application Instructions: Apply 4-8 fl. oz. of Meso 4 SC Select per acre in at least 30 gallons of water per acre with a NIS surfactant. Make a repeat application 2-3 weeks later for optimal weed control. Apply to young, actively growing weeds.

Post-Emergence Application Precautions: Moisture stress and application to mature weeds can reduce herbicide efficacy.

# Bentgrass (*Agrostis* spp.)/Nimbleweed (*Muhlenbergia schreberi*) Control:

Apply 5 fl. oz. **Meso 4 SC Select** per acre in at least 30 gallons of water per acre combined with a NIS surfactant at 2-3 week intervals for a maximum of 3 applications. For optimal Bentgrass control, apply in late summer/early fall just prior to new growth.

# St. Augustinegrass (Sod uses only) and Centipedegrass Treatment:

Apply to established turf ONLY.

# St. Augustinegrass (Sod uses only) and Centipedegrass Restrictions:

- DO NOT exceed 4 fl. oz. Meso 4 SC Select if tank mixing with Atrazine or Simazine.
- DO NOT exceed 0.5 lb. atrazine or simazine active ingredient. See atrazine/ simazine labels for precautions and restrictions.

Dormant Bermudagrass Application only: Apply 5 fl. oz. per acre of Meso 4 SC Select to control winter weeds listed in the Weeds Controlled table below. Make a repeat application 2-3 weeks later. Application of Meso 4 SC Select to semi-dormant turf will cause bermudagrass whitening.

### **Spot Applications of this product**

Spray Mix	Appli- cation Rate	Rate of this product	Rate of NIS ad- juvant
2 gallons	1 gallon per 1,000 sq. ft.	1 tea- spoon	3 tea- spoons

### **Spot Application Restrictions:**

 DO NOT apply more than 16 fl. oz. of Meso 4 SC Select per acre per year.

### WEEDS CONTROLLED USING PRE-EMERGENCE APPLICATION

Apply **Meso 4 SC Select** with a grass pre-emergence herbicide including Barricade 65WG Herbicide, except when used to control weeds in new seedings. **Meso 4 SC Select** will control the following weeds using pre-emergence application:

# WEEDS CONTROLLED USING PRE-EMERGENCE APPLICATION

Common Name	Scientific Name
Barnyardgrass	Echinochloa
	crusgalli
Bentgrass (Creeping)	Agrostis stolonifera
Bluegrass (Annual)*	Poa annua*
Buckhorn Plantain	Plantago lanceloata
Carpetweed	Mollugo verticillata
Chickweed	Stellaria media
(Common)	
Chickweed	Cerastium vulgatum
(Mouseear)	
Clover (Large Hop)	Trifolium aureum
Clover (White)	Trifolium repens
Crabgrass (Large)	Digitaria sanguinalis
Crabgrass (Smooth)	Digitaria ischaemum
Crabgrass	Digitaria ciliaris
(Southern)	
Foxtail (Yellow)	Setaria glauca
Galinsoga	Galinsoga ciliate
Lambsquarters	Chenopodium album

<sup>\*</sup>Suppression only. *(continued)* 

# WEEDS CONTROLLED USING PRE-EMERGENCE APPLICATION (cont.)

Common Name	Scientific Name
Pigweed (Redroot)	Amaranthus
	retroflexus
Pigweed (Smooth)	Amaranthus
	hybridus
Purslane (Common)	Portulaca oleracea
Shepherd's Purse	Capsella
	bursa-pastoris
Smartweed (Pale)	Polygonum
	lapathifolium
Smartweed	Polygonum
(Pennsylvania)	pensylvanicum
Speedwell (Persian)	Veronica persica
Speedwell (Purslane)	Veronica peregrine
Wild Carrot	Daucus carota

### WEEDS CONTROLLED USING POST-EMERGENCE APPLICATION

Make a second application of **Meso 4 SC Select** 2-3 weeks after initial treatment. For optimal control, add a NIS-type surfactant and apply to young, actively growing weeds. **Meso 4 SC Select** will control the following weeds using post-emergence application:

Common Name	Scientific Name
Barnyardgrass	Echinochloa
	crusgalli
Bentgrass (Creeping)	Agrostis stolonifera
Buckhorn Plantain	Plantago lanceloata
Carpetweed	Mollugo verticillata
Chickweed	Stellaria media
(Common)	
Chickweed	Cerastium vulgatum
(Mouseear)	
Clover (Large Hop)	Trifolium aureum
Clover (White)	Trifolium repens

# WEEDS CONTROLLED USING POST-EMERGENCE APPLICATION (cont.)

Common Name	Scientific Name
Crabgrass (Large)*	Digitaria
	sanguinalis*
Crabgrass (Smooth)*	Digitaria
	ischaemum*
Crabgrass	Digitaria ciliaris*
(Southern)*	
Curly dock	Rumex crispus
Dandelion (Catsear)	Hypochoeris
	radicata
Dandelion (Common)	Taraxacum officinale
Florida Betony	Stachys floridana
Florida Pusley	Richardia scabra
Foxtail (Yellow)	Setaria glauca
Galinsoga	Galinsoga ciliate
Goosegrass*	Eleusine indica*
Ground Ivy	Glechoma
	hederacea
Heal-All	Prunella vulgaris

<sup>\*</sup>For optimal control, apply to less than 4 tiller crabgrass and goosegrass.

# WEEDS CONTROLLED USING POST-EMERGENCE APPLICATION (cont.)

Common Name	Scientific Name
Henbit	Lamium amplexicaule
Lambsquarters (Common)	Chenopodium album
Lawn Burweed	Soliva sessilis
Lovegrass (Tufted)	Eragrostis pectinacea
Marestail	Conyza Canadensis
Nimblewill	Muhlenbergia schreberi
Nutsedge (Yellow)	Cyperus esculentus
Oxalis	Oxalis stricta
Pigweed (Redroot)	Amaranthus retroflexus
Pigweed (Smooth)	Amaranthus hybridus
Purslane (Common)	Portulaca oleracea
Shepherd's Purse	Capsella bursa-pastoris

# WEEDS CONTROLLED USING POST-EMERGENCE APPLICATION (cont.)

Common Name	Scientific Name
Smartweed (Pale)	Polygonum
	lapathifolium
Smartweed	Polygonum
(Pennsylvania)	pensylvanicum
Sowthistle	Sonchus oleraceus
Swinecress	Coronopus didymus
Thistle (Canada)	Cirsium arvense
Verbena	Verbena hastate
Wild Carrot	Daucus carota
Wild Violet	Viola pratincola
Windmill-grass	Chloris verticillata

#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Keep container tightly closed when not in use. Keep away from heat and flame. Do not store near seed, fertilizers, or foodstuffs. Can be stored at temperatures as low as minus 20°F. Keep away from heat and flame.

**Pesticide Disposal:** Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited.

### STORAGE AND DISPOSAL (cont.)

**Container Handling ≤ 5 Gallons:** 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 formulation equipment. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into formulation equipment or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### STORAGE AND DISPOSAL (cont.)

**Container Handling ≥ 5 Gallons:** Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### **STORAGE AND DISPOSAL** (cont.)

**Container Handling [Greater Than 5 Gallons**]: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

### CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Prime Source, a division of Albaugh LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Prime Source, a division of Albaugh LLC and Seller harmless for any claims relating to such factors.

Prime Source, a division of Albaugh LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Prime Source, a division of Albaugh LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLI-CABLE LAW, PRIME SOURCE, A DIVISION OF ALBAUGH LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EX-PRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Prime Source, a division of Albaugh LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product.

TO THE EXTENT CONSISTENT WITH APPLI-CABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF PRIME SOURCE, A DIVISION OF ALBAUGH LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON **BREACH OF WARRANTY, CONTRACT, NEG-**LIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF PRIME SOURCE, A DIVISION OF ALBAUGH LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Prime Source, a division of Albaugh LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Prime Source, a division of Albaugh LLC.

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