

**Armor**  **Tech**®

**TRIONE™**

**GROUP 27 HERBICIDE**

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

<b>ACTIVE INGREDIENT:</b>	<b>By Weight</b>
Mesotrione: 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione .....	40.0%
<b>OTHER INGREDIENTS:</b> .....	<b>60.0%</b>
<b>TOTAL:</b> .....	<b>100.0%</b>

Contains 4 lbs. Mesotrione per gallon.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

**See complete First Aid, Precautionary Statements, and Directions For Use in the attached booklet.**

**EPA Reg. No. 87290-62-86064**

**EPA Est. No. 89332-GA-001**

**Distributed by:**

United Turf Alliance, LLC  
8014 Cumming Highway, Suite 403-282  
Canton, GA 30115

**Net Contents: 1/2 Gallon (64 fl. oz.)**

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**United Turf Alliance**

## FIRST AID

### IF IN EYES

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

### IF ON SKIN

- 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, 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.

## 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 must 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.**

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  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, poly-ethylene, polyvinyl chloride (PVC)  $\geq$  14 mils, and viton  $\geq$  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.**

**ArmorTech TRIONE** 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 may be reduced under dry conditions. Activate **ArmorTech TRIONE** 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.

**ArmorTech TRIONE** 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 **ArmorTech TRIONE** with other pre-emergence herbicides such as Barricade® 65WG for longer residual and broad spectrum control.

### APPROVED USE SITES

**ArmorTech TRIONE** can be applied to commercial and residential turfgrasses. Non-crop area use sites include golf courses, sod farms, athletic fields, parks, residential and commercial properties, cemeteries, airports, and lawns.

#### **Turfgrass Use Precautions:**

Residential Lawns: Do not make broadcast applications for pre- and post-emergent weed control unless the home lawn is being reseeded and/or renovated as whitening of some turfgrasses may occur.

Apply **ArmorTech TRIONE** at reduced rates of 4 fl. oz./A or less if tank mixing with atrazine, bentazon, or simazine. Before tank mixing **ArmorTech TRIONE** 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 **ArmorTech TRIONE** 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 **ArmorTech TRIONE**.

DO NOT apply more than 16 oz. (or 0.50 lb. mesotrione per acre per year) per acre per year or per crop whichever is shorter.

DO NOT plant any crop other than turfgrass for 18 months post-application of this product to avoid turfgrass injury.

DO NOT apply organophosphate or carbamate insecticides within 7 days of applying **ArmorTech TRIONE**.

DO NOT apply **ArmorTech TRIONE** 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.

### Turfgrass Species Controlled by this Product

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

\*See additional rate instructions below.

## RESISTANCE MANAGEMENT

There is no known resistance to **ArmorTech TRIONE** and no known instances of cross-resistance between the active ingredient in **ArmorTech TRIONE** (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, and 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 **ArmorTech TRIONE** 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 such as Barricade 65WG for extended control of crabgrass and foxtail.

### Pre-Emergence Application Precautions:

**ArmorTech TRIONE** is more 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 Seedlings/New Lawns

Apply 5-8 fl. oz. **ArmorTech TRIONE** 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. **ArmorTech TRIONE** 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 Seedlings/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 **ArmorTech TRIONE** 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*) Treatment:**

Apply 5 fl. oz. **ArmorTech TRIONE** 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 weed 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. **ArmorTech TRIONE** 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 **ArmorTech TRIONE** to control winter weeds listed in the **Weeds Controlled** table below. Make a repeat application 2-3 weeks later. Application of **ArmorTech TRIONE** to semi-dormant turf will cause bermudagrass whitening.

**Spot Applications of this Product**

<b>Spray Mix</b>	<b>Application Rate</b>	<b>Rate of this product</b>	<b>Rate of NIS adjuvant</b>
2 gallons	1 gallon per 1,000 sq. ft.	1 teaspoon	3 teaspoons

**Spot Application Restrictions:**

DO NOT apply more than 16 oz. of **ArmorTech TRIONE** per acre per year or per crop (equivalent to 0.5 lb. mesotrione per acre per year), whichever is shorter.

**WEEDS CONTROLLED USING PRE-EMERGENCE APPLICATION**

Apply **ArmorTech TRIONE** with a grass pre-emergence herbicide such as Barricade 65WG Herbicide, except when used to control weeds in new seedings. **ArmorTech TRIONE** will control the following weeds using pre-emergence application:

<b>Common Name</b>	<b>Scientific Name</b>
Barnyardgrass	<i>Echinochloa crusgalli</i>
Bentgrass (Creeping)	<i>Agrostis stolonifera</i>

(continued)

**WEEDS CONTROLLED USING PRE-EMERGENCE APPLICATION (continued)**

<b>Common Name</b>	<b>Scientific Name</b>
Bluegrass (Annual)*	<i>Poa annua</i> *
Buckhorn Plantain	<i>Plantago lanceolata</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed (Common)	<i>Stellaria media</i>
Chickweed (Mouseear)	<i>Cerastium vulgatum</i>
Clover (Large Hop)	<i>Trifolium aureum</i>
Clover (White)	<i>Trifolium repens</i>
Crabgrass (Large)	<i>Digitaria sanguinalis</i>
Crabgrass (Smooth)	<i>Digitaria ischaemum</i>
Crabgrass (Southern)	<i>Digitaria ciliaris</i>
Foxtail (Yellow)	<i>Setaria glauca</i>
Galinsoga	<i>Galinsoga ciliate</i>
Lambsquarters	<i>Chenopodium album</i>
Pigweed (Redroot)	<i>Amaranthus retroflexus</i>
Pigweed (Smooth)	<i>Amaranthus hybridus</i>
Purslane (Common)	<i>Portulaca oleracea</i>
Shepherd's purse	<i>Capsella bursa-pastoris</i>
Smartweed (Pale)	<i>Polygonum lapathifolium</i>
Smartweed (Pennsylvania)	<i>Polygonum pensylvanicum</i>
Speedwell (Persian)	<i>Veronica persica</i>
Speedwell (Purslane)	<i>Veronica peregrine</i>
Wild Carrot	<i>Daucus carota</i>

\*Suppression only

## WEEDS CONTROLLED USING POST-EMERGENCE APPLICATION

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

Common Name	Scientific Name
Barnyardgrass	<i>Echinochloa crusgalli</i>
Bentgrass (Creeping)	<i>Agrostis stolonifera</i>
Buckhorn Plantain	<i>Plantago lanceolata</i>
Carpeweed	<i>Mollugo verticillata</i>
Chickweed (Common)	<i>Stellaria media</i>
Chickweed (Mouseear)	<i>Cerastium vulgatum</i>
Clover (Large Hop)	<i>Trifolium aureum</i>
Clover (White)	<i>Trifolium repens</i>
Crabgrass (Large)*	<i>Digitaria sanguinalis*</i>
Crabgrass (Smooth)*	<i>Digitaria ischaemum*</i>
Crabgrass (Southern)*	<i>Digitaria ciliaris*</i>
Curly dock	<i>Rumex crispus</i>
Dandelion (Catsear)	<i>Hypochoeris radicata</i>
Dandelion (Common)	<i>Taraxacum officinale</i>
Florida Betony	<i>Stachys floridana</i>
Florida Pusley	<i>Richardia scabra</i>
Foxtail (Yellow)	<i>Setaria glauca</i>
Galinsoga	<i>Galinsoga ciliate</i>
Goosegrass*	<i>Eleusine indica*</i>
Ground Ivy	<i>Glechoma hederacea</i>
Healall	<i>Prunella vulgaris</i>

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

(continued)

**WEEDS CONTROLLED USING POST-EMERGENCE APPLICATION (continued)**

<b>Common Name</b>	<b>Scientific Name</b>
Henbit	<i>Lamium amplexicaule</i>
Lambsquarters (Common)	<i>Chenopodium album</i>
Lawn Burweed	<i>Soliva sessilis</i>
Lovegrass (Tufted)	<i>Eragrostis pectinacea</i>
Marestail	<i>Conyza Canadensis</i>
Nimblewill	<i>Muhlenbergia schreberi</i>
Nutsedge (Yellow)	<i>Cyperus esculentus</i>
Oxalis	<i>Oxalis stricta</i>
Pigweed (Redroot)	<i>Amaranthus retroflexus</i>
Pigweed (Smooth)	<i>Amaranthus hybridus</i>
Purslane (Common)	<i>Portulaca oleracea</i>
Shepherd's purse	<i>Capsella bursa-pastoris</i>
Smartweed (Pale)	<i>Polygonum lapathifolium</i>
Smartweed (Pennsylvania)	<i>Polygonum pensylvanicum</i>
Sowthistle	<i>Sonchus oleraceus</i>
Swinecress	<i>Coronopus didymus</i>
Thistle (Canada)	<i>Cirsium arvense</i>
Verbena	<i>Verbena hastate</i>
Wild Carrot	<i>Daucus carota</i>
Wild Violet	<i>Viola pratincola</i>
Windmill grass	<i>Chloris verticillata</i>

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

### **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.

**Container Handling [Less Than or Equal to 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 mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or 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, 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 United Turf Alliance, 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 United Turf Alliance, LLC and Seller harmless for any claims relating to such factors.

United Turf Alliance, 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 United Turf Alliance, LLC, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, United Turf Alliance, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, neither United Turf Alliance, 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 APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF United Turf Alliance, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, 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 United Turf Alliance, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

United Turf Alliance, 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 United Turf Alliance, LLC.