

ACCEPTED

LICENSE NO. **8969.5**

Armor  **Tech**®

SULF 396

GROUP 14 HERBICIDE

Turfgrasses and NON-CROP USES

For use in Railroad, Highway, Roadside, Pipeline and Utility Rights of Way, Industrial Areas, Fence Rows, and Other Listed Non-Crop Sites

ACTIVE INGREDIENT:

Sulfentrazone: N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazole-1-yl]phenyl]methanesulfonamide 39.6%

OTHER INGREDIENTS: 60.4%

TOTAL: 100.0%

Contains 4.0 lbs. active ingredient per gallon

**KEEP OUT OF REACH OF CHILDREN
WARNING/AVISO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See inside label booklet for complete First Aid, Precautionary Statements, and Directions For Use.

EPA Reg. No. 87290-59-86064

EPA Est. No. 5905-AR-01^{HW}, 89332-GA-001^{MA}, 89019-IND-001^{SI}
Letter(s) in lot number correspond to letter(s) following the EPA Est. No.

Distributed by:

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

Net Contents: 1 Gallon

20160226



United Turf Alliance

FIRST AID**IF SWALLOWED:**

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

IF INHALED:

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

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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical information concerning this product, call the poison control center at **1-800-222-1222**.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

May be fatal if swallowed. Harmful if absorbed through skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or use the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (Barrier laminate, Butyl rubber \geq 14 mils, Nitrile rubber \geq 14 mils, Neoprene rubber \geq 14 mils, Natural rubber \geq 14 mils, Polyvinyl chloride \geq 14 mils or Viton \geq 14 mils)
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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 before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to marine/estuarine invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from the area treated. Do not apply where runoff is likely to occur. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label.

GROUNDWATER ADVISORY

Sulfentrazone is known to leach through soil into groundwater when this product is used under certain conditions, especially when soils are permeable and the water table is shallow. Groundwater contamination may result under these conditions.

Do not use this product on coarse soils, such as sand, which has less than 1% organic matter.

SURFACE WATER ADVISORY

Sulfentrazone contaminates surface water through spray drift. It may also runoff into surface water under some conditions (primarily via dissolution in runoff water), for several months post-application. These conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface water, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlying tile drainage systems that drain to surface water.

PHYSICAL/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 through any type of irrigation system. 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.

DO NOT exceed specified label rates listed in this label. Refer to the directions for use for maximum use rates for specific crops. Calculate the 12-month period for the purpose of maximum use rates from the time that this product is first applied.

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 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 over long-sleeved shirt and long pants
- Chemical-resistant gloves (Barrier laminate, Butyl rubber \geq 14 mils, Nitrile rubber \geq 14 mils, Neoprene rubber \geq 14 mils, Natural rubber \geq 14 mils, Polyvinyl chloride \geq 14 mils or Viton \geq 14 mils).
- 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 children and pets off treated area until dry.

HERBICIDE RESISTANCE

ArmorTech SULF 396 must be applied at specified label rates according to the directions in this label. Do not apply ArmorTech SULF 396 at rates that are lower than the specified rates listed in this label. Apply ArmorTech SULF 396 when weeds are small.

If weed control is less than desirable, and cannot be attributed to error in application, abnormal height of weed species, or extreme weather conditions, it is possible that the target species is resistant to sulfentrazone applications. If weed resistance occurs, ArmorTech SULF 396 may not provide adequate control of target weeds. Contact your local State agricultural specialists if you suspect that target weeds are resistant to sulfentrazone application.

Repeated application of this product or other products can cause weed resistance to occur. Contact your local State agricultural specialists for strategies to manage herbicide resistance. To avoid weed resistance, apply ArmorTech SULF 396 in rotation with products that have a different mode of action and other classes of chemistry.

PRODUCT INFORMATION

ArmorTech SULF 396 is a soil-applied selective herbicide that controls specific grasses, sedges, and broadleaf weeds. Sulfentrazone, the active ingredient in this product, inhibits a plant enzyme that is required for producing chlorophyll. Disabling this enzyme causes the release of singlet oxygen (O) which disrupts cellular membranes, causing cell leakage and cell death, which ultimately results in weed death.

PROPER HANDLING INSTRUCTIONS

Do not mix or load ArmorTech SULF 396 within 50 feet of any well, including abandoned wells, drainage wells, sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged wells and does not apply to impervious pads or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing to ArmorTech SULF 396 into or from pesticide handling or application equipment or container within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse, or washwater and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain a minimum of 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Do not apply this product through any type of irrigation system. Do not use flood irrigation to apply or incorporate this product.

ArmorTech SULF 396 must be used in a manner which will prevent back siphoning in wells, spills, or improper disposal of excess pesticide, spray mixtures or rinsates.

APPLICATION INSTRUCTIONS

See the crop specific instructions below for additional use precautions/restrictions.

Make broadcast applications of ArmorTech SULF 396 at specified rates in early spring, late summer, or fall for optimal results. Apply in adequate water to provide thorough coverage to make at least 10 gallons finished spray per acre. Use water as the carrier if ArmorTech

SULF 396 is applied alone or in a tank-mix.

Apply ArmorTech SULF 396 using boom and nozzle sprayers or boomless application systems. Make application at spray pressure of ≤ 25 psi, unless otherwise specified by the manufacturer. Use appropriate and calibrated nozzles, spray, tips, and screens for minimum amounts of fine spray droplets, and optimal spray delivery and coverage.

Applications to railroad rights-of-way can be made by helicopter. Do not allow spray to drift to adjacent plants or plant injury can occur.

When activated, ArmorTech SULF 396 will provide control of listed weeds. The level of controls depends on the weed size and type. Dry weather without rain or irrigation will reduce the effect of ArmorTech SULF 396 on germinating weed species. DO NOT apply ArmorTech SULF 396 in drought conditions or when rainfall/irrigation is not available.

Weed seedling and germinating weeds absorb ArmorTech SULF 396 through the soil. The amount of ArmorTech SULF 396 available in the soil will depend on the soil type, soil pH, and amount of organic matter in the soil.

Aerial Application Instructions

Apply ArmorTech SULF 396 with appropriate nozzles that provide optimal coverage and minimize drift and keep fine droplets to a minimum. Apply ArmorTech SULF 396 in a volume that is appropriate to provide sufficient coverage. Use a minimum spray volume of 5 gallons per acre. **Do not** apply ArmorTech SULF 396 when wind speed is likely to cause the product to drift outside the target area.

Ground Application Instructions

Apply ArmorTech SULF 396 with a boom and nozzle sprayer that contains the appropriate spray tips, screens, and nozzles. Calibrate application equipment for optimal coverage and spray distribution at the appropriate pressure. Use spray nozzles designed to minimize drift and keep fine spray droplets to a minimum. Apply ArmorTech SULF 396 in a minimum spray volume of 10 gallons per acre. Overlapping treatment areas can injure crops. When starting, turning or stopping, slower ground speed of the application equipment can lead to crop injury. **Do not** apply ArmorTech SULF 396 when wind speed is likely to cause the product to drift outside the target area.

CALIFORNIA SPECIFIC RESTRICTIONS

Runoff Groundwater Protection Areas: Do not apply ArmorTech SULF 396 in areas defined by the California Department of Pesticide Regulation as being "runoff groundwater protection areas*" unless one of the following management practices can be met:

- 1) Pesticide incorporation:** Within 48 hours after the day this product is applied, the pesticide shall be incorporated on at least 90 percent of the area treated; using a disc, harrow, rotary tiller, or other mechanical method, or by sprinkler or low flow irrigation, including chemigation where allowed by the label, using a minimum of $\frac{1}{4}$ inch of irrigation water and a maximum of one inch as described under Application Instructions, at application rates that do not cause surface water runoff from the treated property or to wells on the treated property; or
- 2) Retention of runoff on field:** For 6 months post-application, the field shall be designed to retain all irrigation runoff and all precipitation on, and drainage through the field by berms, levees, or non-draining circulation systems. The retention area on the field shall not have a percolation rate of more than $0.2''/\text{hour}$ ($5''/24$ hours); or
- 3) Retention of runoff in a holding area off the field:** For 6 months post-application, all runoff shall be channeled to a holding area off of the application site, under the control of the property owner, that is designed to retain all irrigation runoff and all precipitation on, and drainage through, the treated field and all other areas draining onto that holding area. The holding area shall not have a percolation rate of more than $0.2''/\text{hour}$ ($5''/24$ hours); or
- 4) Runoff onto a fallow field:** For 6 months post-application, runoff shall be managed so that it runs off onto an adjacent unenclosed fallow field at least 300 feet long that is not irrigated for 6 months after application with the exception of the addition of adequate moisture that is required for herbicidal activation following application as described under **Application Instructions**, with full consideration of any plant back restrictions.

Artificial Recharge Basins

Do not use ArmorTech SULF 396 below the high water line inside artificial recharge basins (a surface facility, such as an infiltration pond or basin, or spreading ground that is specifically designed and managed to increase the infiltration of introduced surface water supplies into a ground water basin), unless this product is applied 6 months or more before the basin is used to recharge ground water.

Unlined Canals and Ditches

Do not use ArmorTech SULF 396 below the high water line inside unlined canals and ditches unless either (a) the pesticide user can document that the percolation rate of the canal or ditch is equal to or less than 0.2 inches per hour (0.002 gallons per minute per square foot), or (b) the pesticide is applied 6 months before water is run in the canal or ditch.

Rights-of-Way

Do not use on engineered rights-of-way in areas established by the California Department of Pesticide Regulation as leaching or runoff ground water protection areas* unless either (a) any runoff from the treated right-of-way shall pass through a non-crop fully vegetated area adjacent, and equal in area, to the treated area, or spread out onto an adjacent unenclosed fallow field that is at least 300 feet long and that will not be irrigated for 6 months following application with the exception of the addition of adequate moisture that is required for herbicidal activation following application as described under Application Instructions, with full consideration of any plantback restrictions, or (b) the property operator complies with any permit issued pursuant to the storm water provisions of the federal Clean Water Act pertaining to the treated area.

Leaching Ground Water Protection Areas

Do not use in areas designed by the California Department of Pesticide Regulation as leaching ground water protection areas* unless either:

- 1) The user does not apply any irrigation water for 6 months following the application of this product; or
- 2) The user applies this product to the planting bed or the berm above the level of irrigation water in the furrow or basin and the water level shall remain at or below that level for 6 months following application of the pesticide with the exception of the addition of adequate moisture that is required for herbicidal activation following application as described under **Application instructions**; or
- 3) Irrigation is managed so that the ratio of the amount of irrigation water applied divided by the net irrigation requirement is 1.25 or less for 6 months following application of this product.

*Consult with your County Agricultural Commissioner to determine whether the application will be within an area designated by the California Department of Pesticide Regulation as either a Runoff Ground Water Protection Area or a Leaching Ground Water Protection Area. Details regarding the locations of these areas are also available via the internet at www.cdpr.ca.gov/docs/emon/grndwtr/gwp_regs.htm

Application in Combination with Liquid Fertilizers

When applied in combination with a liquid fertilizer ArmorTech SULF 396 will control listed weeds. Seek local advice for fertilizers best suited to your area (i.e., urea or UAN solutions).

Use Directions for Mixing ArmorTech SULF 396 with Herbicides or Liquid Fertilizer Combination

- Prior to combining the liquid fertilizer/herbicide and ArmorTech SULF 396 in the application tank, carry out a glass jar (1 quart size), add all mix partners, in their relative proportions. Invert, shake, or mix the jar thoroughly. If mixture forms precipitates (flakes or sludge), gels, balls up or forms oily films or layers, this indicates incompatibility. Though signs of incompatibility will typically be seen within 5 minutes of mixing, mixture should be observed for approximately 30 minutes). Combine ArmorTech SULF 396 and the carrier liquid fertilizer/herbicide as follows:
 1. Fill a clean spray tank ½ full of fertilizer solution.
 2. Begin agitation of the fertilizer solution.
 3. Use a clean container to create a slurry of ArmorTech SULF 396 and water (equal parts of both)*.

4. Add the slurry slowly to the spray tank, continuing agitation throughout.
5. Rinse the slurry mix container and add rinsate solution to spray tank.
6. Finish filling spray tank to required level.
7. Maintain agitation throughout. The ArmorTech SULF 396/water slurry must be mixed thoroughly prior to application.

*For best mixing of the ArmorTech SULF 396/water slurry, add the slurry using induction systems on the spray fill plumbing system.

Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates, timings, and other restrictions.

Application Instructions for ArmorTech SULF 396 Mixed with Liquid Fertilizers

- The spray application solution must be applied immediately following preparation.
- Maintain agitation throughout mixture and application.
- Do not store spray solution in the spray tank for an extended period of time, or overnight.
- A combination of ArmorTech SULF 396 and liquid fertilizer must not be premixed in nurse tanks.
- Applicators/sellers of liquid fertilizer must follow state regulations for liquid fertilizers, including those regarding preparation, blending, registration, transportation, selling, treatment, and storage.
- Apply the herbicide solution immediately following mixing.
- Maintain mixing throughout application.
- Do not store spray solution in the spray tank for an extended period of time or overnight.
- A tank mixture containing ArmorTech SULF 396 must not be premixed in nurse tanks.

Cleaning Application Equipment

Crop injury can occur if residues of ArmorTech SULF 396 are left in the spray tank following application. Application equipment must be cleaned immediately after treatment with ArmorTech SULF 396, and before applications with other products. Use the following cleaning procedure:

1. Drain the spray application equipment, including tank, hoses, spray boom and nozzles.
 2. Clean inside the spray tank with a high-pressure detergent, removing residues and sediment.
 3. Thoroughly rinse the spray tank.
 4. Flush the spray system out using water, including hoses, spray boom, and spray nozzles.
 5. Combine 3 gallons of ammonia (with a minimum 3% active ingredient) in 100 gallons of water. Make sufficient cleaning solution to operate the spray application equipment for a minimum of 15 minutes so that the system is thoroughly flushed.
 6. Remove spray tips, and all screens and filters and clean separately using the ammonia solution.
 7. Leave the cleaning solution or water in the nozzles, spray booms, hoses and spray tank overnight (or during storage) to ensure thorough cleaning.
 8. Drain the system completely prior to re-use. Use clean water to rinse/flush nozzles, spray booms, hoses and the spray tank. Remove spray tips, and all screens and filters and clean separately using the ammonia solution.
 9. Dispose of rinsate and excess cleaning solution in compliance with Federal, State, and local regulations and guidelines.
- Do not apply rinsate and cleaning solution to sensitive crops.
 - Do not store spray equipment for any extended period of time with ArmorTech SULF 396 solution remains in the spray lines, nozzles, strainers, or boom plumbing.
 - Flush the nozzles and spray boom with clean water prior to use when application equipment has been idle or sitting in storage.
 - If small amounts of ArmorTech SULF 396 remain in the equipment after cleaning, ArmorTech SULF 396 may be released during

later applications, which may cause crop injury to certain crops and/or other vegetation. The applicator is solely responsible for any damage caused by equipment that is not properly cleaned.

- Equipment must not be flushed or drained near desirable plants/trees.
- Ensure that bodies of water are not contaminated with application solution, rinsate or cleaning solution, including water that may be used for other crops, i.e., irrigation water.

SPRAY DRIFT REDUCTION ADVISORY

- Do not apply this product when weather conditions favor drift and/or wind speeds exceed 10 mph.
- Do not exceed spray pressures of 40 psi unless specified by the manufacturer of drift reducing spray tips and nozzles.

Spray Drift Management

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and grower are responsible for considering all these factors when making application decisions. **AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.**

The following drift management requirements must be followed to avoid off-target movement from aerial applications. These requirements do not apply to forestry applications, public health uses, or to applications of dry materials.

- The distance of the outermost nozzles on the boom must not exceed 75% of the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- Observe the regulations of the State where applications are made.
- Applicators must observe and abide by the requirements of the **Aerial Drift Reduction Advisory**.

Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets (450 microns or larger). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!** See **Wind, Temperature and Humidity**, and **Temperature Inversions** sections of this label portion.

Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.** Do not exceed the nozzle manufacturer's specified pressures.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - For aerial application, the recommended practice is to orient nozzles so that the spray is released parallel to the airstream. This orientation usually produces larger droplets as compared to other nozzle orientations. Significant nozzle deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles for both ground and aerial applications. Solid stream nozzles oriented straight back usually produce the largest droplets and the lowest drift potential in aerial applications.

Boom Length

For some aerial use patterns, reducing the effective boom length to less than 75% of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

To minimize spray drift, make applications <10 feet above the top of the target plant canopy, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When aerial applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by the path of the aircraft upwind. Increase swath adjustment or offset distance when conditions favor increased drift potential (higher winds, smaller droplets, etc.).

Wind

Drift potential is lowest between wind speeds of 3 - 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Do not make applications below 3 mph due to variable wind direction and high inversion potential.

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce large droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications must not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, areas known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Drift to Non-Target Areas

If ArmorTech SULF 396 solutions drift into non-target areas, contact with other plants/crops can cause injury. Initially, crop/plant injury may be localized, depending on plant sensitivity and spray solution droplet size. Lesions or spots caused by drift may or may not coalesce. The effects of drift will not normally cause long-term effects on plant growth, but may negatively impact the fruit value or foliage where value is impacted by appearance. Defoliation may occur in plants that are sensitive to ArmorTech SULF 396.

Avoid drift of this product/solution containing this product to non-target areas by taking adequate notice of the prevailing environmental conditions. Use appropriate and accurately calibrated application equipment and utilize treatment procedures that will minimize the risk of drift.

Misapplication of this product where label directions are not followed may result in drift. The applicator/user of this product is solely responsible for any misapplication of ArmorTech SULF 396.

TURF GRASSES

(Including Residential and Institutional Lawns, Athletic Fields, Golf Course Fairways and Roughs and Commercial Sod Farms)

ArmorTech SULF 396 can be used to control broadleaf, grass and sedge weeds in established turfgrasses (seeded, sodded or sprigged). Apply to established turf grasses (good root system; uniform stand) tolerant to ArmorTech SULF 396 (see below). A healthy root system is necessary to fill in exposed edges, which are more susceptible to ArmorTech SULF 396.

Tolerant Turf Grasses	
Cool Season Grasses	Rate
Bentgrass, Creeping* Bluegrass, Kentucky (<i>Poa pratensis</i>) Bluegrass, Rough*** (<i>Poa trivialis</i>) Fescue, Fine** (<i>Festuca rubra</i>) Fescue, Tall** (<i>Festuca arundinacea</i>) Ryegrass, Perennial (<i>Lolium perenne</i>)	Apply ArmorTech SULF 396 at 4 - 8 oz. per acre.
* Apply a maximum of 4 oz. ArmorTech SULF 396 to creeping bentgrass. ** An undesirable plant response can occur if applying ArmorTech SULF 396 to certain varieties of Chewings fine fescue or tall fescue.	
Warm Season Grasses	Rate
Bahiagrass*** (<i>Paspalum notatum</i>) Buffalograss (<i>Buchloe dactyloides</i>) Carpetgrass (<i>Axonopus affinis</i>) Centipedegrass (<i>Eremochloa ophiuroides</i>) Kikuyugrass (<i>Pennisetum clandestinum</i>) Seashore Paspalum (<i>Paspalum vaginatum</i>) Zoysiagrass*** (<i>Zoysia japonica</i>) Bermudagrass (<i>Cynodon dactylon</i>) Bermudagrass Hybrids (<i>Cyn bluegrass</i>) St. Augustinegrass*** (<i>Stenotaphrum secundatum</i>)	Apply ArmorTech SULF 396 at 8 - 12 oz. per acre.
*** St. Augustine grass and some varieties of bahiagrass, rough bluegrass or zoysiagrass, particularly turfgrass that has been stress-weakened can experience temporary leaf surface discoloration (removed upon mowing) upon application of ArmorTech SULF 396. Chemicals, certain cultural practices, disease, mechanical exposure and cultivation and weather can all be causes of stress-weakened turf.	

Not all varieties or cultivars of turf grasses have been tested with ArmorTech SULF 396. Consult with university or weed management specialists for information on using ArmorTech SULF 396 with specific local varieties or cultivars of turfgrass. Prior to treatment on new turfgrass varieties, test response to ArmorTech SULF 396 by applying to a small area of turfgrass.

Do not apply more than 0.375 lb. sulfentrazone (12.0 fl. oz. product) per acre per 12 month period. The 12 month period starts at the point of first application.

Pre-Emergence Weed Control

When applied as indicated on this label, the following weeds will be controlled or suppressed with ArmorTech SULF 396:

Summer Annual Weeds: Apply in early spring, prior to germination of weed seeds.	
Broadleaf Weeds	Grassy Weeds
Black Medic (<i>Medicago lupulina</i>) Common Purslane (<i>Portulaca oleracea</i>) Pigweed, Redroot (<i>Amaranthus retroflexus</i>) Pigweed, Smooth (<i>Amaranthus hybridus</i>) Prostrate Knotweed (<i>Polygonum aviculare</i>) Spurge (<i>Euphorbia</i> spp.) Spurge, prostrate (<i>Euphorbia supine</i>) Spurge, spotted (<i>Euphorbia maculate</i>)	Barnyardgrass (<i>Echinochloa crus-galli</i>) Crabgrass, Large (<i>Digitaria sanguinalis</i>) Crabgrass, Smooth (<i>Digitaria ischaemum</i>) Foxtail, Green (<i>Setaria viridis</i>) Foxtail, Yellow (<i>Setaria glauca</i>) Goosegrass (<i>Eleusine indica</i>)
Winter Annual Weeds: Apply in late summer or early fall.	
Broadleaf Weeds	Grassy Weeds
Buttercups (<i>Ranunculus</i> spp.) Carolina geranium (<i>Geranium carolinianum</i>) Chickweed, common (<i>Stellaria media</i>) Chickweed, mouseear (<i>Cerastium vulgatum</i>) Common groundsel (<i>Senecio vulgaris</i>) Corn Speedwell (<i>Veronica arvensis</i>) Hairy bittercress (<i>Cardamine hirsute</i>) Henbit (<i>Lamium amplexicaule</i>) Knawel (<i>Scleranthus annuus</i>) Large Hop clover (<i>Trifolium campestre</i>) Parsley-piert (<i>Alchemilla microcarpa</i>) Spurweed (<i>Soliva pterosperma</i>) Violet, Johnny-jump-up (<i>Viola rafinesquii</i>)	Annual bluegrass (<i>Poa annua</i>) Annual ryegrass (<i>Lolium multiflorum</i>)

Post-Emergence Weed Control

When applied as indicated on this label, the following weeds in turfgrass will be controlled or suppressed with ArmorTech SULF 396:

Broadleaf Weeds	
Bedstraw, catchweed (<i>Galium aparine</i>) Beggarweed, Florida (<i>Desmodium tortuosum</i>) Bittercress (<i>Cardamine</i> spp.) Black Medic (<i>Medicago lupulina</i>) Buttercup (<i>Ranunculus</i> spp.) Carolina Geranium (<i>Geranium carolinianum</i>) Carpetweed (<i>Mollugo verticillata</i>) Chickweed, Common (<i>Stellaria media</i>) Chickweed, Mouseear (<i>Cerastium vulgatum</i>) Cinquefoil (<i>Potentilla</i> spp.) Clover (<i>Trifolium</i> spp.) Copperleaf (<i>Acalypha</i> spp.) Cudweed (<i>Gnaphalium</i> spp.) Dandelion (<i>Taraxacum officinale</i>) Dock, Curly (<i>Rumex crispus</i>) Dollarweed (<i>Hydrocotyle umbellata</i>) Eclipta (<i>Eclipta prostrata</i>) Evening Primrose (<i>Oenothera biennis</i>) Fiddleneck (<i>Amsinckia</i> spp.) Filaree (<i>Erodium</i> spp.) Galinsoga (<i>Galinsoga ciliata</i>) Garlic, Wild (<i>Allium vineale</i>) Goldenrod (<i>Solidago</i> spp.) Ground Ivy (<i>Glechoma hederacea</i>) Groundsel, common (<i>Senecio vulgaris</i>) Henbit (<i>Lamium amplexicaule</i>) Knawel (<i>Scleranthus annuus</i>) Knotweed, Prostrate (<i>Polygonum aviculare</i>) Kochia (<i>Kochia scoparia</i>)	Lambsquarters, Common (<i>Chenopodium album</i>) Lawn Burweed (Spurweed) (<i>Soliva pterosperma</i>) Lespedeza, Common (<i>Lespedeza striata</i>) Mallow, Common (<i>Malva neglecta</i>) Onion, Wild (<i>Allium canadense</i>) Parsley-piert (<i>Alchemilla arvensis</i>) Pigweed, Redroot (<i>Amaranthus retroflexus</i>) Pigweed, Smooth (<i>Amaranthus hybridus</i>) Pigweed, Tumble (<i>Amaranthus albus</i>) Pineapple Weed (<i>Matricaria matricarioides</i>) Plantain, Buckhorn (<i>Plantago lanceolata</i>) Puncture Weed (<i>Tribulus terrestris</i>) Purslane, Common (<i>Portulaca oleracea</i>) Pusley, Florida (<i>Richardia scabra</i>) Red weed (<i>Melochia corchorifolia</i>) Rocket, London (<i>Sisymbrium irio</i>) Shepherd's Purse (<i>Capsella bursa pastoris</i>) Smartweed, Pennsylvania (<i>Polygonum Pensylvanicum</i>) Sorrel, Red (<i>Rumex acetosella</i>) Speedwell (<i>Veronica</i> spp.) Spurge, Annual (<i>Euphorbia</i> spp.) Spurge, Prostrate (<i>Euphorbia humistrata</i>) Spurge, Spotted (<i>Euphorbia maculata</i>) Star of Bethlehem (<i>Ornithogalum umbellatum</i>) Velvetleaf (<i>Abutilon theophrasti</i>) Violet, Johnny-jump-up (<i>Viola rafinesquii</i>) Violet, Wild (<i>Viola pratincola</i>) Woodsorrel, Creeping (<i>Oxalis corniculata</i>) Woodsorrel, Yellow (<i>Oxalis stricta</i>)
Grassy Weeds	
Goosegrass (<i>Eleusine indica</i>)	

(continued)

Post-Emergence Weed Control - Continued

Sedges	
Kyllinga, False Green (<i>Kyllinga gracillima</i>) Kyllinga, Green (<i>Kyllinga brevifolia</i>) Nutsedge, Purple (<i>Cyperus rotundus</i>)* Nutsedge, Yellow (<i>Cyperus esculentus</i>)	Sedge, Cylindrical (<i>Cyperus retrorsus</i>) Sedge, Globe (<i>Cyperus globulosus</i>) Sedge, Surinam (<i>Cyperus surinamensis</i>) Sedge, Texas (<i>Cyperus polystachyos</i>)
<p>*NOTE: Split applications give optimum control of purple nutsedge. When actively growing purple nutsedge is evident, apply as indicated below:</p> <p>Cool season grasses: 2 - 4 fl. oz. ArmorTech SULF 396 per acre first application, followed by second application of 4 - 6 fl. oz. per acre (do not exceed 8 fl. oz. total on cool season grasses).</p> <p>Warm season grasses: 6 - 8 fl. oz. ArmorTech SULF 396 per acre first application, followed by second application of 4 - 6 fl. oz. per acre (do not exceed 12 fl. oz. total on warm season grasses).</p> <ul style="list-style-type: none">• Observe maximum rate per acre based on turf variety, as indicated above.• Allow 35 days between applications.	

Application Instructions

Apply ArmorTech SULF 396 at specified rates to control or suppress indicated weeds. Optimal control is achieved with grassy weeds when ArmorTech SULF 396 is applied to grasses that are actively growing and small (pre tiller stage). Application rates lower than 12 fl. oz./acre will control grasses for 60 days.

Optimum control of broadleaf weeds will occur if application is made shortly after weed emergence.

Applications to Sprigged, Overseeded, or Reseeded Areas

Turfgrasses can be sprigged, overseeded or reseeded after ArmorTech SULF 396 applications. Best results are obtained from waiting at least 1 month after ArmorTech SULF 396 application before sprigging, overseeding or reseeding. If slight plant response can be tolerated, overseeding of Bermudagrass with perennial ryegrass can be done between 2-4 weeks after ArmorTech SULF 396 application.

Observing proper fertilization, irrigation and soil cultivating practices, and using mechanical or power seeding equipment will give optimum overseeding or reseeding results.

Optimum weed control is obtained with thorough spray coverage.

Tank Mixes and Adjuvants

Tank mixing with other pesticides registered for use on turfgrass can extend the weed control range and enhance efficacy of ArmorTech SULF 396 for both preemergence and post-emergence control. Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, and other restrictions.

Applying ArmorTech SULF 396 with adjuvants or surfactants can cause short-term discoloration of some turf species, and is therefore not recommended for use with adjuvants or surfactants unless the adjuvant/surfactant has been proven to be safe to use with sulfentrazone.

Application Instructions

- Establish sod production areas for three (3) months before applying ArmorTech SULF 396.
- Pre-harvest interval is 3 months.
- Use of ArmorTech SULF 396 mixed with or applied within 7 days of herbicides containing the active ingredient trinexapac-ethyl can result in temporary turfgrass discoloration. Applying ArmorTech SULF 396 and trinexapac-ethyl herbicides 7 or more days apart decreases possibility of discoloration.

Turfgrass Use Restrictions

- Do not apply more than 12.0 fl. oz. (0.375 lb. AI/A) per acre per 12 month-period. The 12 month-period starts at the point of first application.
- Do not apply to ornamental beds or landscape ornamental plants.
- Do not feed forage or allow grazing of turf treated with ArmorTech SULF 396.
- Do not apply ArmorTech SULF 396 to tees or putting greens on golf courses.

NON-CROP USES

For use in Railroad, Highway, Roadside, Pipeline and Utility Rights of Way, Industrial Areas, Fence Rows, and Other Listed Non-Crop Sites

ArmorTech SULF 396 will control susceptible weeds, maintain bare ground and complete vegetation control, and provide residual control of germinating weeds in noncropland areas. When applied as indicated on this label, the following weeds will be controlled with ArmorTech SULF 396:

Beggarweed, Florida (<i>Desmodium tortuosum</i>)	Lambsquarters, Common (<i>Chenopodium album</i>)
Carpentweed (<i>Mollugo verticillata</i>)	Lettuce, Wild (<i>Lactuca virosa</i>)
Chickweed, Common (<i>Stellaria media</i>)	Mallow, Common (<i>Malva neglecta</i>)
Copperleaf Hophornbeam (<i>Acalypha ostryifolia</i>)	Mexicanweed (<i>Caperonia castanifolia</i>)
Crabgrass species (<i>Digitaria</i> spp.)	Milkweed, Honeyvine (<i>Ampelamus albidus</i>)
Croton, Tropic (<i>Cretan glandulosus</i>)	Morningglory species (<i>Ipomoea</i> spp.)
Daisy, American (<i>Coreopsis grandiflora</i>)	Mustard species (<i>Brassica</i> spp.)
Dayflower, Common (<i>Commelina communis</i>)	Nightshade species (<i>Solanum</i> spp.)
Dayflower, Virginia (<i>Commelina virginica</i>)	Nutsedge species (<i>Cyperus</i> spp.)
Dock, Curly (<i>Rumex crispus</i>)	Palmer Amaranth (<i>Amaranthus palmeri</i>)
Fixweed (<i>Descourainia sophia</i>)	Pigweed, Redroot (<i>Amaranthus retroflexus</i>)
Galinsoga, Hairy (<i>Galinsoga ciliata</i>)	Pigweed, Smooth (<i>Amaranthus hybridus</i>)
Groundcherry, Clammy (seedling) (<i>Physalis heterophylla</i>)	Texasweed (<i>Caperonia palustris</i>)
Groundcherry, Cutleaf (<i>Physalis angulata</i>)	Thistle, Russian (<i>Salsola iberica</i>)
Jimsonweed (<i>Datura stramonium</i>)	Waterhemp, Common (<i>Amaranthus rudis</i>)
Kochia (<i>Kochia scoparia</i>)	Waterhemp, Tall (<i>Amaranthus tuberculatus</i>)
ALS/Triazine resistant Kochia (<i>Kochia scoparia</i>)	

See **Listed Weed Species** section of this label for information on additional weeds.

(continued)

For use in Railroad, Highway, Roadside, Pipeline and Utility Rights of Way, Industrial Areas, Fence Rows, and Other Listed Non-Crop Sites - Continued

Application can be made to non-crop use sites including:

- **Railroad Rights-of-Way** - including railroad yards, railroad crossings and railroad bridge abutments.
- **Highway, Roadside, Pipeline, and Utility Rights-Of-Way** - including, but not limited to guardrails, road shoulders, electric utility substations, pipeline pumping stations, around electric transmission towers, around distribution line poles, and other areas where complete vegetation control is needed.
- **Industrial Areas, Fence Rows and Other Non-Crop Sites** - including production facilities, tank farms, storage areas, parking areas, lumber yards, airports, military installations, along fence rows, and similar non-crop sites.

Application Rates

Apply 8 - 12 fl. oz. / acre

Use higher rates within the specified rate range:

- To extend length of control.
- On soils with fine soil textures.
- On soils with more than 2% organic matter.

Do not use on soils with less than 1% organic matter (sandy soils).

Tank Mixes

Tank mix ArmorTech SULF 396 with burndown herbicides (such as 2,4-D, dicamba, diquat, glyphosate, glyphosate trimesium, etc.). Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, and other restrictions.

Adjuvants recommended for tank mix partner can be used.

Important

- Do not apply more than 12.0 fl. oz. sulfentrazone (0.375 lb. AI/A) per acre per 12-month period. The 12-month period starts at the point of first application.
- Do not use on soils with less than 1% organic matter (sandy soils).
- Applications by helicopter can only be made to railroad rights of way.

STORAGE AND DISPOSAL

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

Pesticide Storage: STORE ABOVE -4°F TO KEEP PRODUCT FROM FREEZING. If frozen, thaw before use. Keep out of reach of children and animals. Store in original containers only. Store in a dry place. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. To confine spill: Dike surrounding area or absorb with sand, cat litter or commercial clay. Place damaged package in a holding container. Identify contents.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal

Plastic: Non-Refillable Containers: 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 and continue to 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 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 or reconditioning, 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.

IMPORTANT: READ BEFORE USE

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 unopened product container at once.

By using the 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. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of United Turf Alliance, LLC. To the extent consistent with applicable law, such risks shall be assumed by the user or buyer.

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