



# TRIBUTE®

Total

**Herbicide**



|                       |
|-----------------------|
| THIENCARBAZONE-METHYL |
| FORAMSULFURON         |
| HALOSULFURON-METHYL   |

|       |   |           |
|-------|---|-----------|
| GROUP | 2 | HERBICIDE |
|-------|---|-----------|

A Herbicide for the Postemergence Control of Grass Weeds, Sedges and Kyllingas, and Broadleaf Weeds; as well as the Removal of Overseeded Ryegrass in Bermudagrass and Zoysiagrass of Commercial and Residential Sites

**ACTIVE INGREDIENTS:** Thiencarbazone-methyl (CAS Number 317815-83-1).....9.9%  
Foramsulfuron (CAS Number 173159-57-4) ..... 19.8%  
Halosulfuron-methyl (CAS Number 100784-20-1).....30.8%

**OTHER INGREDIENTS:**.....39.5%

**TOTAL:** 100.0%

Tribute® Total is formulated as a water dispersible granule

EPA Reg. No. 101563-147

EPA Est. No. 000264-DEU-001

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

For MEDICAL and TRANSPORTATION Emergencies

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

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

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

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

Net Contents

**6 Ounces (170g)**

81746257

80895577G 221216AV1



(01)08101121003412

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**THIENCARBAZONE-METHYL**

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**HALOSULFURON-METHYL**

**GROUP**

**2**

**HERBICIDE**

**FIRST AID****If  
swallowed:**

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

**If in eyes:**

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

**If on skin or  
clothing:**

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

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

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

## FIRST AID

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

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators and other handlers must wear:

- long-sleeved shirt and long pants
- shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## ENGINEERING CONTROLS STATEMENTS

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

### User Safety Recommendations

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

## ENVIRONMENTAL HAZARDS

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 contaminate water when cleaning equipment or disposing of equipment washwaters and rinsate. Do not drain or rinse equipment near desirable vegetation. Do not apply when conditions favor drift from treated areas. Non-target plants may be adversely affected if the pesticide is allowed to drift from areas of application. To prevent damage to crops and other desirable plants, read and follow all directions and precautions on this label before using.

### Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. 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 loading of this product from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

### Ground Water Advisory

All of the chemicals in this products are known to have properties and characteristics associated with chemicals detected in ground water. These chemicals may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

### **Non-Target Organism Advisory**

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

### **DIRECTIONS FOR USE**

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

**Read entire label before using this product.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is coveralls over long-sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves made out of any waterproof material.

### **NON AGRICULTURAL USE REQUIREMENTS**

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

### **PRODUCT INFORMATION PRODUCT USES**

Tribute® Total (water dispersible granule) is a selective, postemergence herbicide for the control of grass weeds, sedges and kyllingas, and broadleaf weeds growing in well-established turfgrass. Tribute® Total can also be used as a transition aid for the removal of overseeded cool season grasses from turfgrass. Tribute® Total is for use only on commercial and residential turf including golf courses (excluding greens and overseeded tees), residential and commercial lawns, sports fields, cemeteries, parks, campgrounds, recreational areas, roadsides, school grounds, and sod farms.

### **SYMPTOMOLOGY**

Weed growth is inhibited within hours after application yet visible symptoms typically require 1 or more weeks before becoming evident – the meristematic regions become chlorotic followed by slow, general foliar color changes and necrosis. Eventual plant death usually occurs within 1 to 4 weeks after treatment. The speed of symptom development varies with temperature and will be faster at warmer temperatures.

### **MODE OF ACTION**

The active ingredients found in Tribute® Total inhibit the protein acetolactate synthase (ALS), also known as acetoxyacid synthase (AHAS). The ALS enzyme catalyzes the first step in the biosynthesis of the essential branched chain amino acids (valine, leucine, and isoleucine). The lowered levels of ALS enzyme and branched chain amino acids trigger further biochemical events culminating in the death of the weed.

### **WEED RESISTANCE MANAGEMENT**

For resistance management, Tribute® Total is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

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

## APPLICATION METHODS

### SPRAY SOLUTION pH

The efficacy of Tribute® Total may be affected by the pH of the spray solution. A pH near 6 is ideal. If pH is greater than 6, add a spray buffer.

## SPRAY VOLUME

For broadcast applications, use a minimum of 10 gallons of water per acre. For weed control in dense weed populations, control of weeds under adverse growing conditions, or control of mature weeds, use higher spray volumes up to 60 gallons per acre.

## PRODUCT USE RATES

### BROADCAST APPLICATIONS

| To Treat 1 Acre<br>oz/Acre | To Treat 1,000 Square Feet<br>Tribute® Measuring Spoon      oz/1,000 sq ft |       | Comments   |
|----------------------------|--|-------|--|
| 1                          | 1 ml   | 0.023 | Maximum single application rate is 3.2 oz/acre <sup>1</sup> .<br>Maximum yearly application rate is 6.4 oz/acre <sup>2</sup> . |
| 2                          | 2 ml   | 0.046 |  |
| 3.2                        | 3.2 ml   | 0.073 |  |

<sup>1</sup> 3.2 oz/acre represents 0.02 lb Thiencazone-methyl/Acre; 0.04 lb foramsulfuron/acre; and 0.062 lb Halosulfuron-methyl/acre.

<sup>2</sup> 6.4 oz/acre represents 0.04 lb Thiencazone-methyl/Acre; 0.08 lb foramsulfuron/acre; and 0.12 lb Halosulfuron-methyl/acre.

## SPOT TREATMENTS

Spot Treatments are for controlling individual weeds and/or small areas of weeds. To make a Spot Treatment, mix 0.023 oz. – 0.073 oz of Tribute® Total per gallon of water and add appropriate spray adjuvant(s). Spray weeds until wet but avoid spray solution runoff and over application. Spot treatments may cause temporary yellowing and stunting to turfgrass. For spot treatments, treat no more than 10,000 sq. ft. per acre per application.

## SPRAY ADJUVANTS

**Tribute® Total requires a spray adjuvant.** For maximum weed control, use the spray adjuvant(s) as specified in the 'WEEDS CONTROLLED' section of this label. These additives may also cause phytotoxicity to desirable turfgrasses under some situations. Test their use in a limited area that can tolerate damage and visually monitor for turf tolerance over several weeks prior to widespread use.

- Use 0.25 to 0.5% v/v of a Nonionic Surfactant (NIS). Do not exceed 1 quart of NIS per acre as turf injury may result.
- OR, instead of an NIS, use 0.5 to 1% v/v of a methylated seed oil (MSO) containing at least 80% methylated seed oil and 10% or greater emulsifier (up to 1% v/v). Other MSO blends must be tested before use.
- The addition of ammonium sulfate (AMS) has been shown to improve efficacy. Use spray grade AMS (1 1/2 to 3 lb/acre) for areas of high relative humidity or use urea ammonium nitrate (UAN) (1 1/2 to 2 Qt/acre) in areas of low relative humidity.
- Use the higher rates of NIS or MSO with higher spray volumes.
- In areas with hard water, use the addition of ammonium sulfate (AMS) or urea ammonium nitrate (UAN).

Always read and follow the spray adjuvant label directions prior to use and observe all precautions, mixing and application instructions.

### **MIXING INSTRUCTIONS**

Tribute® Total must be applied with clean and properly calibrated equipment. Prior to adding Tribute® Total, ensure that the spray tank, filters, and nozzles have been thoroughly cleaned.

1. Fill spray tank with ¼ to ½ the required volume of water.
2. Begin agitation prior to the addition of Tribute® Total and continue throughout this entire mixing process (Steps 2. – 6.)
3. Add Tribute® Total. Once it is fully dispersed, resume adding water to the desired volume.
4. If Tribute® Total is to be applied in a tank mixture with other pesticides, the general order of addition for pesticides, by product form is, from first-in-spray-tank to last-in-spray-tank: WP or WG (this product) > DF > F > EC > SP or SC.
5. Finally, add the spray adjuvant and liquid fertilizer, if desired. Finish filling the spray tank with water to the desired volume.
6. Continue agitation during application to ensure a uniform spray mixture.

If this product is to be tank-mixed with other products, test compatibility prior to mixing and test turf tolerance prior to use. To test for compatibility, use a small container and mix a small amount (1/2 to 1 quart) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop (e.g., precipitation, settling, color change), do not use this mixture for spraying. Indications of incompatibility may occur within 5 to 15 minutes after mixing. To test for turf tolerance, apply the tank mix at the specified rate to a small area that can tolerate damage and monitor

visually for turf damage over several weeks. If damage is unacceptable, do not apply Tribute® Total. Read and follow the precautionary statements, directions for use, and restrictions of each tank mix product. The most restrictive language applies.

### **APPLICATION**

Uniform, thorough spray coverage is important to achieve consistent weed control. Select spray nozzles and pressure that deliver medium spray droplets as indicated in nozzle manufacturers' catalogs and in accordance with ASABE Standard S-572.1. Nozzles that deliver coarse spray droplets may be used to reduce spray drift provided spray volume per acre (GPA, Gallons Per Acre) is increased to maintain coverage of weeds.

### **PRECAUTIONS**

1. Rainfall within the first 3 hours after treatment may require retreatment with this product or reduced weed control may result.
2. Make applications to actively growing weeds. Mature, hardened-off weeds may not be controlled. Weed control may be reduced if application is made in the presence of heavy dew, fog, and mist/rain or when weeds are under stress due to drought.
3. Apply spray mixtures of this product within 48 hours of mixing to avoid product degradation.
4. Avoid excessive mechanical disruptions such as aerification and verticutting within 1 week prior to or after application of Tribute® Total.
5. Apply this product only to well-established turf unless noted otherwise on this label.
6. Avoid application of this product on turf under stress such as drought, insects, disease, cold temperatures, or poor fertility as injury may result.

### **RESTRICTIONS**

1. Do not apply more than 3.2 oz of product per acre in one application. Do not apply more than a total of 6.4 oz of product per acre per year.
2. Maximum number of applications per year depends on the application rate used. Do not exceed 2 broadcast applications per year at 3.2 oz of product per acre.
3. Do not apply this product by air or through any type of irrigation system.
4. Do not apply this product on turf exhibiting injury from previous applications of other products.
5. In order to minimize risk to sensitive areas (water bodies or non-target plants), apply by broadcast application (boom-type sprayers) only when the potential for drift to adjacent sensitive areas is minimal (e.g., when the wind is 10 mph or less and is blowing away from the sensitive area).

6. Do not use this product on these grasses: bahiagrass, buffalograss, centipedegrass, kikuyugrass, St. Augustinegrass, or seashore paspalum and cool season turf types, including tall fescue, fine fescue, Kentucky bluegrass, perennial ryegrass, annual ryegrass, or creeping bentgrass.
7. Do not apply this product when wind causes drift to off-site vegetation as injury may occur.
8. Do not use this product for grasses grown for seed.

#### **TURF TOLERANCE**

This product was tested and can be used on the following types of warm season turfgrasses and their cultivars. Some temporary stunting of growth and discoloration (yellowing) may occur after treatment but the turf will recover. When turfgrass top growth is slowed (e.g., due to plant growth regulator or environmental effects), these symptoms may take longer to develop, may take longer to subside, and/or may be accentuated.

- Bermudagrass (Celebration, Common, Greg Norman 1, Patriot, TifGrand, Tifton 10, Tifway 419, TifSport, Vamont, Tifgreen 328)
- Zoysiagrass (Emerald, Empire, Meyer, Palisades, Zeon, Zenith, Zorro)

Do not use Tribute® Total on pure stands or mixtures of turfgrasses not listed on this label without first testing for adequate turf tolerance. To test, apply Tribute® Total at the specified rate to a small plot representative of the larger area to be treated. Visually monitor for turf damage up to 2 weeks. If damage is unacceptable, do not apply Tribute® Total.

#### **SEEDING AND SPRIGGING INTERVALS**

Overseeded Ryegrass –

- Do not apply Tribute® Total within 8 weeks prior to overseeding for neutral to alkaline soils (pH > 6.5).
- Do not apply within 5 weeks for acidic soils (pH < 6.5).

Seeded Turfgrass Tribute® Total may be applied to turfgrass up to 3 months prior to seeding without a significant reduction in stand. For newly seeded turfgrass, do not apply Tribute® Total for at least one month after emergence since injury may result.

Sprigged / Sodded turfgrass Tribute® Total may be applied no sooner than 2 weeks after sprigging or sodding without a significant reduction in quality.

#### **USE OF TRIBUTE® TOTAL NEAR SENSITIVE GRASSES**

Tribute® Total will control cool season grasses. Some use sites, including many golf courses, grow different turf types in the same vicinity e.g., bermudagrass fairways near bentgrass greens. To reduce the possibility

of Tribute® Total being carried from its application site to adjoining areas with sensitive grasses, practice the following within the first 48 hours after application near sensitive grasses:

- Avoid application when heavy rain is imminent or when the soil is saturated – these conditions increase the risk of surface runoff.
- If dew is present the next 2 mornings after application, irrigate lightly (0.1 to 0.2 inch) prior to allowing traffic into the area.
- If the preceding practices cannot be achieved, maintain a 15 ft. untreated area to reduce the risk of tracking from the application site onto sensitive grasses.

#### **TANK MIX PARTNERS**

When using Tribute® Total in tank mix combinations, follow the precautions and directions of the most restrictive label. Test compatibility with other unlisted pesticides prior to use. When tank-mixing with other products, it is the responsibility of the end-user applicator to ensure that the tank-mix partner is registered in the state where the application is being made.

Applications of Tribute® Total can be made in conjunction with a preemergence herbicide, such as Specticle® FLO Herbicide or Ronstar® FLO Herbicide to obtain preemergence and postemergence activity. Always follow the most restrictive overseeding interval listed in the products used.

Tribute® Total may be combined with Sencor® 75% Turf Herbicide to expand the postemergence weed control spectrum.

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

#### **SPRAY EQUIPMENT CLEANUP**

1. Drain the tank completely, then wash out tank, boom and hoses with clean water. Drain again.
2. Fill the tank half full with clean water and add EITHER a commercial tank cleaner OR an appropriate detergent, being certain to carefully follow manufacturer's use directions. Completely fill the tank with water. Agitate/ recirculate and flush through boom and hoses. Leave agitation on for 10 minutes. Drain tank completely.
3. Repeat Step 2.
4. Remove nozzles and screens and soak them in the cleaning solution. Inspect nozzles and screens and remove visible residues.
5. Flush tank, boom, and hoses with clean water.
6. Inspect tank for visible residues. If present, repeat Step 2.

**WEEDS CONTROLLED**  
**APPLICATION RATES AND TIMING FOR SELECT WEEDS**

| TARGET WEED                                    | RATE<br>Oz Product/Acre          | APPLICATION<br>INTERVAL (Weeks) | APPLICATION<br>TIMING   |
|--|----------------------------------|---------------------------------|---|
| Crabgrass (Large crabgrass, Smooth crabgrass)* | 3.2<br>Plus NIS                  | 4 – 6                           | Controls crabgrass from emergence up to 2 tiller stage. Multiple applications may be needed where crabgrass is at multi-tillered stages.  |
| Dallisgrass<br>Spot Application                | 0.073 oz / gal<br>Plus MSO + AMS | 4 – 6                           | Make 2 applications beginning late summer/early fall. Make a 3 <sup>rd</sup> application the following spring if regrowth is observed. Other application timings yield dallisgrass suppression. |
| Doveweed*                                      | 3.2<br>Plus MSO + AMS            | 6 – 10                          | Apply late July / early August. Make a repeat application at regrowth.  |
| Goosegrass*                                    | 3.2<br>Plus MSO + AMS            | 4 – 6                           | Controls goosegrass up to early tiller stages.  |
| Sedges & Kyllingas                             | 3.2<br>Plus NIS + AMS            | 6 – 10                          | Controls sedges up to 8 leaf growth stage. Controls/suppresses Kyllingas. Treat new plants as they emerge.  |

(continued)

**WEEDS CONTROLLED**  
**APPLICATION RATES AND TIMING FOR SELECT WEEDS (continued)**

| TARGET WEED  | RATE<br>Oz Product/Acre          | APPLICATION<br>INTERVAL (Weeks) | APPLICATION<br>TIMING   |
|--|----------------------------------|---------------------------------|---|
| Ryegrass,<br><i>Poa annua</i><br>(Spring Transition) | 1<br>Plus NIS                    | ---                             | Apply when removal of overseeded ryegrass/ <i>Poa annua</i> is desired and turfgrass has resumed spring growth.                       |
| Tropical<br>Signalgrass                              | 3.2<br>Plus NIS                  | 4                               | Spring applications control tropical signalgrass up to 4 tiller stage.  |
|  | 3.2<br>Plus MSO + AMS            | 2 – 3                           | Fall applications control mature / perennialized tropical signalgrass.  |
| Tropical<br>Signalgrass<br>Spot Application          | 0.073 oz / gal<br>Plus MSO + AMS | 2 – 3                           | To control mature/perennialized tropical signalgrass, make repeat Spot Applications – fewer number of apps are needed at Fall timing. |
| Virginia<br>Buttonweed                               | 3.2<br>Plus MSO + AMS            | 4 – 6                           | Apply late spring / early summer. Make a repeat application at regrowth.  |

\*For long-lasting control, use Tribute® Total in program with a preemergence herbicide such as Specticle®.  
NIS – Nonionic Surfactant  
MSO – Methylated Seed Oil  
AMS – Ammonium Sulfate



## OTHER GRASS WEEDS, SEDGES, AND BROADLEAF WEEDS

Grass weeds, sedges and broadleaf weeds are best controlled while young and actively growing. This is the best time to apply Tribute® Total. Always include a spray adjuvant. Weeds are difficult to control when mature and/or undergoing environmental stress, such as hot temperatures or drought. Herbicide applications made at this time usually result in poor weed control and increased risk of damage to turf. Larger and/or mature weeds may require a higher rate (up to 3.2 oz/A) or sequential applications.

### Weeds controlled at 1 oz Tribute® Total per acre

| Common Name           | Scientific Name             |
|-----------------------|-----------------------------|
| Bentgrass, Creeping   | <i>Agrostis stolonifera</i> |
| Bluegrass, Annual     | <i>Poa annua</i>            |
| Bluegrass, Roughstalk | <i>Poa trivialis</i>        |
| Ryegrass - Transition | <i>Lolium</i> spp.          |

### Weeds controlled at 2 oz Tribute® Total per acre

| Common Name                   | Scientific Name             |
|-------------------------------|-----------------------------|
| Barley, Little                | <i>Hordeum pusillum</i>     |
| Carpetweed (Indian chickweed) | <i>Mollugo verticillata</i> |
| Chickweed, Common             | <i>Stellaria media</i>      |
| Chickweed, Mouseear           | <i>Cerastium vulgatum</i>   |
| Clover, Hop                   | <i>Trifolium</i> spp.       |
| Clover, Rabbitfoot            | <i>Trifolium arvense</i>    |
| Clover, White                 | <i>Trifolium repens</i>     |

(continued)

### Weeds controlled at 2 oz Tribute® Total per acre (continued)

| Common Name   | Scientific Name   |
|---|---|
| Common vetch  | <i>Vicia sativa</i>   |
| Cudweed   | <i>Gnaphalium</i> , <i>Pseudognaphalium</i> , and <i>Gamochaeta</i> spp.                              |
| Cutleaf evening primrose  | <i>Oenothera laciniata</i>  |
| Dandelion, Carolina false   | <i>Pyrrhopappus carolinianus</i>  |
| Fescue, Tall  | <i>Schedonorus phoenix</i> ( <i>Festuca arundinacea</i> )   |
| Florida pusley  | <i>Richardia scabra</i>   |
| Hairy bittercress   | <i>Cardamine hirsuta</i>  |
| Henbit  | <i>Lamium amplexicaule</i>  |
| Knawel  | <i>Scleranthus annuus</i>   |
| London rocket   | <i>Sisymbrium irio</i>  |
| Plantain, Buckhorn  | <i>Plantago lanceolata</i>  |
| Plantain, Paleseed  | <i>Plantago virginica</i>   |
| Ryegrass - Volunteer or 'Clumpy'  | <i>Lolium</i> spp.  |
| Shepherdspurse  | <i>Capsella bursa-pastoris</i>  |
| Speedwell, Corn   | <i>Veronica arvensis</i>  |
| Spur weed (Lawn burrweed) *   | <i>Soliva sessilis</i>  |
| Texas toadflax  | <i>Nuttallanthus texanus</i> ( <i>Linaria canadensis</i> var. <i>texana</i> , <i>Linaria texana</i> ) |
| *use not permitted in California unless otherwise directed by supplemental labeling |   |

**Weeds controlled at 3.2 oz Tribute® Total per acre**

| Common Name                        | Scientific Name                |
|------------------------------------|--------------------------------|
| Annual blue-eyed grass             | <i>Sisyrinchium rosulatum</i>  |
| American burnweed (Fireweed)       | <i>Erechtites hieracif</i>     |
| Bahiagrass (suppression)           | <i>Paspalum notatum</i>        |
| Buttonweed, Virginia               | <i>Diodia virginiana</i>       |
| Carolina Geranium                  | <i>Geranium carolinianum</i>   |
| Cocklebur, Common                  | <i>Xanthium strumarium</i>     |
| Crabgrass, Large (Hairy crabgrass) | <i>Digitaria sanguinalis</i>   |
| Crabgrass, Smooth                  | <i>Digitaria ischaemum</i>     |
| Dallisgrass                        | <i>Paspalum dilatatum</i>      |
| Dollarweed (Pennywort)             | <i>Hydrocotylespp.</i>         |
| Doveweed                           | <i>Murdannia nudiflora</i>     |
| Facelis (Annual Trampweed)         | <i>Facelis retusa</i>          |
| Fleabane, Philadelphia             | <i>Erigeron philadelphicus</i> |
| Goosegrass                         | <i>Eleusine indica</i>         |
| Knotweed, Prostrate                | <i>Polygonum aviculare</i>     |
| Kyllinga                           | <i>Kyllinga spp.</i>           |
| Mallow, Venice                     | <i>Hibiscus trionum</i>        |
| Nutsedge, Purple                   | <i>Cyperus rotundus</i>        |

(continued)

**Weeds controlled at 3.2 oz Tribute® Total per acre (continued)**

| Common Name   | Scientific Name  |
|---|--|
| Nutsedge, Yellow                                    | <i>Cyperus esculentus</i>  |
| Parsley-piert                                       | <i>Aphanes microcarpa (Alchemilla microcarpa)</i>                              |
| Paspalum, Bull, Thin paspalum                       | <i>Paspalum setaceum</i>   |
| Passionflower, Maypop                               | <i>Passiflora incarnata</i>  |
| Pigweed, Redroot                                    | <i>Amaranthus retroflexus</i>  |
| Pokeweed, Common                                    | <i>Phytolacca americana</i>  |
| Radish, Wild  | <i>Raphanus raphanistrum</i>   |
| Ragweed, Common                                     | <i>Ambrosia artemisiifolia</i>   |
| Ragweed, Giant                                      | <i>Ambrosia trifida</i>  |
| Rescuegrass, Rescue brome                           | <i>Bromus catharticus</i>  |
| Sedge, Annual                                       | <i>Cyperus compressus</i>  |
| Sedge, Cylindric                                    | <i>Cyperus retrorsus</i>   |
| Sedge, Globe  | <i>Cyperus croceus (C. globulosus)</i>   |
| Sedge, Surinam                                      | <i>Cyperus surinamensis</i>  |
| Sedge, Texas  | <i>Cyperus polystachyos</i>  |
| Signalgrass, Tropical, Smallflowered alexandergrass | <i>Urochloa distachya (Urochloa subquadriflora, Brachiaria subquadriflora)</i> |
| Smartweed, Pennsylvania                             | <i>Polygonum pensylvanicum</i>   |

(continued)

## Weeds controlled at 3.2 oz Tribute® Total per acre (continued)

| Common Name        | Scientific Name                           |
|--------------------|---|
| Spurge, Garden     | <i>Chamaesyce hirta (Euphorbia hirta)</i> |
| Spurge, Spotted    | <i>Chamaesyce maculata</i>                |
| Sunflower, Common  | <i>Helianthus annuus</i>                  |
| Velvetleaf         | <i>Abutilon theophrasti</i>               |
| Woodsorrel, Yellow | <i>Oxalis stricta</i>                     |

### SPRAY DRIFT MANAGEMENT

Damage to sensitive, non-targeted plants may occur as a result of spray drift. Spray drift can be managed by several application factors and by spraying under appropriate environmental conditions. Consequently, avoidance of spray drift is the responsibility of the applicator.

#### MANDATORY SPRAY DRIFT

##### Ground Boom Applications:

Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.

Applicators are required to use a medium or coarser droplet size (ASABE S572.1).

Do not apply when wind speeds exceed 10 miles per hour at the application site.

Do not apply during temperature inversions.

##### Boom-less Ground Applications:

Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.

Do not apply when wind speeds exceed 10 miles per hour at the application site.

Do not apply during temperature inversions.

**Sensitive Areas:** Apply by broadcast application (boom-type sprayers) only when the potential for drift to adjacent sensitive areas (water bodies or non-target plants) is minimal (e.g., when wind is 10 mph or less and is blowing away from the sensitive areas). Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Do not apply under circumstances where possible drift to unprotected persons or to food, forage, desirable plants, or crops intended for sale, use, or consumption.

In order to minimize risk to sensitive areas (water bodies or non-target plants), apply by broadcast application (boom-type sprayers) only when the potential for drift to adjacent sensitive areas is minimal (e.g., when the wind is 10 mph or less and is blowing away from the sensitive area).

#### Spray Drift Advisory

##### Boom-less Ground Applications:

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

##### Handheld Technology Applications:

- Take precautions to minimize spray drift.

#### SPRAY DRIFT ADVISORIES

- THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

- An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### Controlling Droplet Size – Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **BOOM HEIGHT – Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

### **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

**WINDBLOWN SOIL PARTICLES:** Tribute® Total has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affect the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying Tribute® Total if prevailing local conditions may be expected to result in off-site movement.

## **STORAGE AND DISPOSAL**

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

### **PESTICIDE STORAGE**

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

### **PESTICIDE DISPOSAL**

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

### **CONTAINER HANDLING**

**Rigid Non-refillable Containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)**Non-refillable container. Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

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

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

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

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water.

*(continued)*

## STORAGE AND DISPOSAL *(continued)*

Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

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

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

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

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

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

#### **PLASTIC CONTAINERS:**

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

#### **SOLID Dillutable formulations:**

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  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 if available or puncture and dispose of in a sanitary landfill, or by incineration.

### **Non-Seed Treatment Products in Non-Rigid, Non-refillable Containers = BAGS**

Nonrefillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

## CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

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

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

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

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