



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505T)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

84229-61

Date of Issuance:

5/23/24

NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Tide Ethephon 2 SL

Name and Address of Registrant (include ZIP Code):

Tide International, USA, Inc.  
c/o Pyxis Regulatory Consulting Inc.  
4110 136th St. Ct. NW  
Gig Harbor, WA 98332

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

*Continues page 2*

Signature of Approving Official:

Kristy Crews, Ph.D., Product Manager 22  
Fungicide Branch, Registration Division (7505T)  
Office of Pesticide Programs, USEPA

Date:

5/23/24

2. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 84229-61."
3. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 12/12/2022

If you have any questions, please contact Thomas Harty at 202-566-0394 or at [harty.thomas@epa.gov](mailto:harty.thomas@epa.gov).

Enclosure- Stamped Label

[Note to reviewer: [Text] in brackets denotes optional text].

[Note to reviewer: {Text} in braces denotes where in the final label text will appear].

{BOOKLET FRONT PANEL}

# Tide Ethephon 2 SL

For Commercial Use on Golf Course Turf. Not For Residential Use.

**ACCEPTED**

05/23/2024

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 84229-61

## ACTIVE INGREDIENT:

Ethephon [(2-chloroethyl)phosphonic acid]\* .....21.7%

**OTHER INGREDIENTS:** .....78.3%

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

\*Contains 2 pounds ethephon per gallon.

**KEEP OUT OF REACH OF CHILDREN**

**DANGER /PELIGRO**

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.)

## FIRST AID

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

**HOT LINE NUMBER:** Have the product container or label with you when calling a poison control center or doctor or going for treatment. For additional information on this pesticide product, including health concerns, medical emergencies, or pesticide incidents, you may call **CHEMTREC®** at **1-800-424-9300**, 24 hours per day, 7 days per week.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

Victims of severe overexposure, by inhalation, should be kept under medical observation for up to 72 hours for delayed onset of pulmonary edema. In a victim of overexposure by ingestion, careful gastric lavage is required due to the possibility of stomach or esophageal perforation. This material is an acid, but the use of alkaline substances to neutralize it is contraindicated.

[See] [inside] [label] [booklet] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including] [Storage and Disposal] [instructions][,]

EPA Reg. No.: 84229-xx

EPA Est. No.:

Net Contents:

## Manufactured by:

Tide International, USA, Inc.  
21 Hubble  
Irvine, CA 92618

## PRECAUTIONARY STATEMENTS

### DANGER/PELIGRO

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Corrosive: Causes irreversible eye damage. Wear safety goggles when handling. Harmful if swallowed or absorbed through skin. **DO NOT** get in eyes or on clothing. Avoid contact with skin. **DO NOT** inhale vapors, as this product will irritate mucous membranes.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirts and long pants, chemical-resistant gloves (made of barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, or viton  $\geq 14$  mils) shoes plus socks, and protective eyewear.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product concentrate. **DO NOT** reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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.

Users should remove clothing immediately if pesticide gets inside. Then wash body thoroughly and change into clean clothing. The contaminated clothing should be washed before reuse.

Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

#### ENVIRONMENTAL HAZARDS

**DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters.

**NON-TARGET ORGANISM ADVISORY STATEMENT:** 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 site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

#### PHYSICAL OR CHEMICAL HAZARDS

**DO NOT** use with or store near any oxidizing or reducing agents.

## DIRECTIONS FOR USE

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

**DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations. Read entire label before using this product.

#### PRODUCT USE

Tide Ethephon 2 SL is a plant growth regulator that may be used to suppress the formation of seedheads of various plants including *Poa annua* and white clover and also to suppress the growth of certain cool season grasses. Tide Ethephon 2 SL is foliarly absorbed and is most effective on actively growing healthy turf. For best results, apply in sufficient volume of water to provide uniform coverage. Use of a spreader/sticker with an application of Tide Ethephon 2 SL is not necessary. Tide Ethephon 2 SL is rainfast within 2 hours. **DO NOT** allow entry into treated area until Tide Ethephon 2 SL has dried. For maximum performance, delay mowing until the day after application.

#### RESTRICTIONS

**DO NOT** use this product for purposes other than those listed on the label.

**DO NOT** treat turfgrass with poor root systems or growing under stress due to poor soil conditions, drought, disease, or insect damage.

**DO NOT** use Tide Ethephon 2 SL in areas where excessive thatch has accumulated.

**DO NOT** contaminate water used for irrigation or domestic purposes.

**DO NOT** apply Tide Ethephon 2 SL through any type of irrigation system.

Use is permitted on golf course turf only. **DO NOT** use on residential turf or lawns, institutional turf, parks, recreational fields, or sod farms.

Use on golf courses is limited to tees, greens, and fairways only.

**DO NOT** apply more than 217.6 fl. oz (3.4 lbs of ethephon a.i.) of Tide Ethepon 2 SL/A per application.

**DO NOT** apply more frequently than every 14 days.

East of the Mississippi River: **DO NOT** apply more than 871.8 fl. oz (13.6 lbs. of ethephon a.i.) of Tide Ethepon 2 SL/A per year. **DO NOT** exceed 20 fl. oz (0.312 lb of ethephon a.i.) of Tide Ethepon 2 SL per 1,000 sq. ft. per year.

West of the Mississippi River: **DO NOT** apply more than 1307.7 fl. oz (20.4 lbs. of ethephon a.i.) of Tide Ethepon 2 SL/A per year. **DO NOT** exceed 30 fl. oz (0.465 lb of ethephon a.i.) of Tide Ethepon 2 SL per 1,000 sq. ft. per year.

Tide Ethepon 2 SL has been used successfully on many bentgrass cultivars. Tolerance testing must be done on new cultivars before extensive use.

Mix only the amount of spray you expect to use each day. **DO NOT** allow mixed solution to stand overnight.

**DO NOT** buffer spray solutions.

Test tank mixes with other products on a small area before using widely.

IMMEDIATELY RINSE ANY SPILLS WITH PLENTY OF WATER AS TIDE ETHEPHON 2 SL IS CORROSIVE.

**DO NOT** MIX TIDE ETHEPHON 2 SL WITH AMMONIUM THIOSULFATE. SUCH TANK MIXTURES MAY RESULT IN FORMATION OF TOXIC FUMES.

## PRECAUTIONS

Avoid spray drift to nearby crops, as this product will cause modifications in plant growth. Plant injury may result.

Scalping may occur on creeping bentgrass cultivars after more than 2 applications of Tide Ethepon 2 SL for *Poa* seedhead suppression.

### EQUIPMENT CLEANING

Prolonged exposure to spray deposits will damage acrylic plastics, certain paints, and metals because of the acidic nature of this product.

Rinse thoroughly all exposed acrylic plastic materials and painted surfaces with a detergent and water within one hour after exposure to spray deposits.

## SPRAY DRIFT

### Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground.
- For all applications, applicators are required to use a fine to 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:

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

- For ground equipment, the boom should remain level with the ground 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.

## TURF

**Seedhead Suppression:** Foliar application of Tide Ethephon 2 SL will provide suppression of *Poa annua* and white clover seedheads. Make the initial application prior to the emergence of new seedheads. A period of 2-3 weeks after application is required for maximum performance. Repeat applications may be made to predominately *Poa annua* or white clover sites as needed, but not less than two weeks after the previous application. Follow other precautions and restrictions on the label.

APPLICATION	SITES	RATE	SPRAY VOLUME
<b><u>Poa annua and White Clover Seedhead Suppression:</u></b> Reapplication interval: 2 weeks or greater for all labeled grasses	Golf course turf including Greens, Tees, and Fairways Commercial Turfgrasses including Bentgrass, Kentucky Bluegrass, Perennial Ryegrass, Tall & Fine Fescue, and Bermudagrass	5 fl oz (0.08 lb ethephon a.i.)/1,000 sq ft	1.0 – 2.0 gal/1,000 sq ft

**Tank Mixture with appropriately labeled products containing the active ingredient trinexapac-ethyl:** Tank mixtures of Tide Ethephon 2 SL at 5 oz (0.08 lb ethephon a.i.) per 1,000 sq ft and appropriately labeled products containing trinexapac-ethyl including Primo MAXX at 0.125 or 0.25 ounce per 1,000 sq ft can be used to promote seedhead suppression as well as turfgrass quality. Multiple applications of the tank mix combination may be needed. The number of applications must not exceed recommendations for rates or timings for either product applied once. Follow the recommendation on each product label for the most restrictive application interval for each turfgrass. Application of this tank mixture during frost periods may cause temporary turf discoloration.

**Growth Suppression:** An application of Tide Ethephon 2 SL slows the growth of turfgrasses, thus reducing the required frequency of mowing and the volume of clippings collected. For best turfgrass growth regulation, apply Tide Ethephon 2 SL when daytime air temperatures are 65°F and rising. Tide Ethephon 2 SL must only be applied once turfgrass mowing heights have been established for the season. Avoid multiple applications of Tide Ethephon 2 SL in areas where excessive thatch has accumulated.

APPLICATION	SITES	RATE	SPRAY VOLUME
<b><u>Turfgrass Growth Regulation</u></b> Reapplication intervals: <ul style="list-style-type: none"> <li>Kentucky Bluegrass-7 weeks</li> <li>Perennial Ryegrass-7 weeks</li> <li>Tall/Fine Fescue-4 weeks</li> <li>Bentgrass-4 weeks</li> </ul>	Golf course turf including Greens, Tees, and Fairways Commercial Turfgrasses including Bentgrass, Kentucky Bluegrass, Perennial Ryegrass, Tall & Fine Fescue	5 fl oz (0.08 lb ethephon a.i.)/1,000 sq ft	1.0 – 2.0 gal/1,000 sq ft

## STORAGE AND DISPOSAL

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

### STORAGE

Store in original container and keep tightly closed. Store in a cool dry place.

### PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. 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. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### CONTAINER HANDLING

**[Non-refillable plastic container ≤5 gal :]** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

**[Non-refillable plastic container >5 gal :]** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

Tide International, USA, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Tide International, USA, Inc., and Buyer and User assumes the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, TIDE INTERNATIONAL, USA, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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

To the extent consistent with applicable law, in no event shall Tide International, USA, Inc. or Seller be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER AND BUYER, AND THE EXCLUSIVE LIABILITY OF TIDE INTERNATIONAL, USA, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE, AT THE ELECTION OF TIDE INTERNATIONAL, USA, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT, OR COMPENSATION LIMITED TO DAMAGES NOT EXCEEDING THE FAIR MARKET PURCHASE PRICE, AND SHALL NOT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

Tide International, USA, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of Tide International, USA, Inc.

[EPA Approval Date]