



U.S. ENVIRONMENTAL PROTECTION AGENCY

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

EPA Reg. Number:

93930-36

Date of Issuance:

10/1/20

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Avalaire T-Pac 1 EC

Name and Address of Registrant (include ZIP Code):

Beth Anderson
Sr Regulatory Manager
Avalaire, LLC
1204 Village Market Place, #173
Morrisville, NC 27560

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.

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.
2. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Signature of Approving Official:

 FOR

Mindy Ondish, Product Manager 23
Herbicide Branch, Registration Division (7505P)

Date:

10/1/20

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 the Federal Insecticide Fungicide and Rodenticide Act 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) list 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.

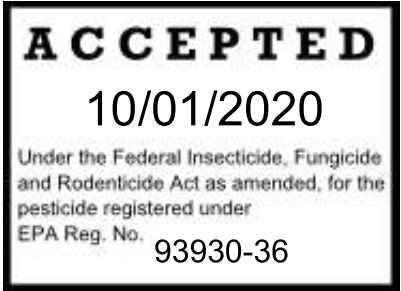
The alternate brand name "**Zatopek 1 EC**" is noted for the product record.

Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 05/14/2020

If you have any questions, please contact Endia Blunt by phone at 703-347-0788, or via email at Blunt.Endia@epa.gov.

Enclosure



[Note to reviewer: [Text] in brackets denotes optional or explanatory language
[Note to reviewer: {Text} in braces denotes where in the final label text will appear
{BOOKLET FRONT PANEL LANGUAGE}]

AVALAIRE T-PAC 1 EC [™]

[Alternate Brand Name: Zatopek 1 EC]

[For growth management of grasses grown for seed, wheat, triticale, barley, oats, rye, rice, and sugarcane.]

ACTIVE INGREDIENT:	(% by weight)
Trinexapac-ethyl*.....	12.0%
OTHER INGREDIENTS:	88.0%
TOTAL	100.0%

*CAS No. 95266-40-3

AVALAIRE T-PAC 1 EC is an emulsifiable concentrate containing 1 pound of active ingredient per gallon.
Contains petroleum distillates.

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 First Aid, Precautionary Statements and Directions for Use.

EPA Reg. No.: 93930-36

EPA Est. No.:

Net Contents:

Manufactured for:
Avalaire, LLC
1204 Village Market, #173
Morrisville, NC 27560

{LANGUAGE INSIDE BOOKLET}

FIRST AID	
If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none">• 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 on skin or clothing:	<ul style="list-style-type: none">• 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 swallowed:	<ul style="list-style-type: none">• Immediately call a poison control center or doctor.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give any liquid to the person.• Do not give anything by mouth to an unconscious person.
NOTE TO PHYSICIAN	
If ingested, lavage stomach with care to prevent aspiration of stomach contents. An aqueous suspension of activated charcoal can be given to absorb remaining toxicant. Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

**For Chemical Emergency:
Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)**

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

Causes substantial but temporary eye injury. Harmful if absorbed through skin or inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using 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 made of barrier laminate or Viton®
- Shoes plus socks
- Protective eyewear

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.

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d-e)], the handler PPE requirements may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.607(e)].

USER SAFETY RECOMMENDATIONS

Users should:

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

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 disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift from treated areas. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. See the Spray Drift Management section for further instructions on avoiding drift.

PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow coming into contact with oxidizing agents, hazardous chemical reaction may occur.

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and 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:

- Protective eyewear
- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate or Viton
- Shoes plus socks

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

PRODUCT INFORMATION

Apply this product in accordance with the use directions that follow. **AVALAIRE T-PAC 1 EC** is a plant growth regulator (PGR) which acts by inhibiting the production of gibberellic acid. It shortens the internodes on grasses grown for seed and cereals which results in a reduction in lodging. It also acts as a PGR in sugarcane by shortening the internodes which improves seed piece production and when used prior to harvest, increases and/or maintains the sugar content for an extended harvest window. **AVALAIRE T-PAC 1 EC** is rapidly absorbed by the foliage. The PGR effects do not occur through soil uptake.

USE INSTRUCTIONS

Application: Thorough coverage is necessary to provide good activity. Make up no more spray solution than is needed for application. Avoid spray overlap, as crop injury may occur.

Adjuvants: When an adjuvant is to be used with this product, the use of an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program is recommended.

Efficacy: The activity and performance of **AVALAIRE T-PAC 1 EC** is primarily affected by: (1) environmental conditions, (2) crop management and cultural practices that affect crop growth and vigor, (3) fertility level, (4) moisture availability, (5) plant vigor, and (6) crop growth stage. **AVALAIRE T-PAC 1 EC** acts by inhibiting the production of gibberellic acid.

Plant-back Interval (PBI):

Crop	Days to Plant-back After the Last Application of AVALAIRE T-PAC 1 EC
Wheat Barley Triticale Oats Rye Rice Grasses Grown for Seed Sugarcane	0 days
All Other Food or Feed Crops	30 days

Crop Tolerance: Plant tolerance has been found acceptable for all crops on the label, however, not all possible tank mix combinations have been tested under all conditions nor have all varieties been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of the crop to ensure a phytotoxic response will not occur as a result of application.

Spray Drift Management: Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states or tribes have more stringent regulations, they must be observed. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER. To reduce the potential for drift, the application equipment must be set to apply medium to coarse droplets (i.e., ASABE Standard 572) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

Wind:

Avoid making applications when spray particles may be carried by air currents to nontarget areas. Do not spray if wind is gusty, below 2 mph, or in excess of 10 mph and moving in the direction of adjacent sensitive areas. Local terrain may influence wind patterns; the applicator must be familiar with local conditions and understand how they may impact spray drift.

Sensitive Areas:

Sensitive areas to this product are defined as bodies of water (ponds, lakes, rivers, streams, and wetlands), known habitats of threatened or endangered species and nonlabelled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas.

Temperature Inversion:

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Presence of ground fog is a good indicator of a surface temperature inversion. Do not apply during temperature inversions. Always make applications when there is some air movement to determine the direction and distance of possible spray drift.

Equipment:

All aerial and ground equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety.

When applications are made with a crosswind, the swath will be displaced downwind.

The applicator must compensate for this by adjusting the path of the aircraft upwind.

Additional requirements for ground applications:

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

MIXING AND APPLICATION METHODS**Spray Equipment****Nozzles**

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles should be the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.
- It is suggested that screens be used to protect the pump and to prevent nozzles from clogging.
- Screens placed on suction side of pump should be *16-mesh or coarser*.
- Do not place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles.
- Check nozzle manufacturer's recommendations.

Pump

- Use a pump with capacity to:
- maintain 35-40 psi at nozzles.
- provide sufficient agitation in tank to keep mixture in suspension - this requires recirculation of 10% of tank volume per minute.
- Use a jet agitator or liquid sparge tube for agitation.
- Do not use air sparge.

For more information on spray equipment and calibration, consult sprayer manufacturers' and state recommendations. For specific local directions and spray schedules, consult the current state agricultural recommendations.

Mixing Instructions

- Prepare no more spray mixture than is required for the immediate operation.
- Thoroughly clean spray equipment before using this product.
- Agitate the spray solution before and during application.

- Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.
- Do not allow spray mixture to stand overnight or for prolonged periods of time.

AVALAIRE T-PAC 1 EC Alone (no tank mix):

- Add 1/2 - 2/3 of the required amount of water to the spray or mixing tank.
- With the agitator running, add **AVALAIRE T-PAC 1 EC** to the tank.
- Continue agitation while adding the remainder of the water.
- Mix in enough water (10-20 gal/A) to thoroughly and uniformly cover crop.
- Begin application of the spray solution after **AVALAIRE T-PAC 1 EC** has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

AVALAIRE T-PAC 1 EC + Tank Mixtures:

- **AVALAIRE T-PAC 1 EC** is usually compatible with all tank-mix partners listed on this label.
- To determine the physical compatibility of **AVALAIRE T-PAC 1 EC** with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 quart of water. Add wettable powders and water dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the restrictive directions for use and precautionary statements of each product in the tank mixture.

Mixing in the Spray Tank

- Add 1/2-2/3 of the required amount of water to the spray or mixing tank.
- With the agitator running, add the tank mix partner(s) into the tank in the same order as described above.
- Allow the material to completely dissolve and disperse into the mix water. Continue agitation while adding the remainder of the water and **AVALAIRE T-PAC 1 EC** to the spray tank.
- Allow **AVALAIRE T-PAC 1 EC** to completely disperse.
- Spray the mixture with the agitator running.

AVALAIRE T-PAC 1 EC + Tilt® (propiconazole, EPA Reg. No. 100-617) or Slant™ (propiconazole, EPA Reg. No. 91234-25) or Quilt® Fungicide (azoxystrobin and propiconazole, EPA Reg. No. 100-1178) or Atticus Aquila XL™ (azoxystrobin and propiconazole, EPA Reg. No. 91234-76)

- Add 1/2 –2/3 of the required amount of water to the spray tank.
- While agitating, add **AVALAIRE T-PAC 1 EC** followed by Tilt or Quilt Fungicide.
- Continue agitation while adding the remainder of the water.
- Maintain agitation until all of the mixture has been applied.

WEED RESISTANCE MANAGEMENT

For resistance management, **AVALAIRE T-PAC 1 EC** is a Group 23 herbicide. Any weed population may contain or develop plants naturally resistant to **AVALAIRE T-PAC 1 EC** and other Group 23 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of **AVALAIRE T-PAC 1 EC** or other Group 23 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

- 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 certified crop 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 crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout 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 such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- 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 crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact **Avalaire**, LLC representatives at 984-465-4754.

APPLICATION INSTRUCTIONS

AVALAIRE T-PAC 1 EC may be applied with all types of spray equipment commonly used for making ground and aerial applications. Proper adjustments and calibration of spraying equipment to give good coverage is essential for good growth regulator effects.

Ground Application:

- Apply in a minimum of 10 gallons of water per acre, unless specified otherwise.
- Do not apply through any ultra-low volume (ULV) spray system.
- Thorough coverage is necessary for good growth regulator effects.

Aerial Application:

- Thorough coverage is necessary to provide a good, uniform effect.
- A minimum of 2 gallons of diluent per acre can be used in grasses grown for seed, cereals, and sugarcane.
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.
- Do not apply directly to humans or animals.
- Do not apply through any ultra-low volume (ULV) spray system.

Application Through Irrigation Systems (Chemigation)

- Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system.
- Distribute treated water in a uniform manner to prevent crop injury, lack of effectiveness, or illegal pesticide residues. Apply in 0.1 - 0.25 inches/A of water. Excessive water may reduce efficacy.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Note: Do not inject **AVALAIRE T-PAC 1 EC** at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 10 parts water to 1-part **AVALAIRE T-PAC 1 EC**. **AVALAIRE T-PAC 1 EC** is corrosive to many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton[®], Buna-N, Neoprene, or PVC seals.

Operating Instructions

1. The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Center Pivot Irrigation Equipment

Notes: (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating **AVALAIRE T-PAC 1 EC** through center pivot systems because of non-uniform application.

- Determine the size of the area to be treated.
- Determine the time required to apply 1/8-1/2 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying **AVALAIRE T-PAC 1 EC** through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of **AVALAIRE T-PAC 1 EC** required to treat the area covered by the irrigation system.
- Add the required amount of **AVALAIRE T-PAC 1 EC** and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection of the **AVALAIRE T-PAC 1 EC** solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the **AVALAIRE T-PAC 1 EC** solution has cleared the sprinkler head.

Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

Notes: (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating **AVALAIRE T-PAC 1 EC** through center pivot systems because of non-uniform application.

- Determine the acreage covered by the sprinklers.

- Fill injector solution tank with water and adjust flow rate to use the contents over a 20- to 30-minute interval. When applying **AVALAIRE T-PAC 1 EC** through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of **AVALAIRE T-PAC 1 EC** required to treat the area covered by the irrigation system.
- Add the required amount of **AVALAIRE T-PAC 1 EC** into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the **AVALAIRE T-PAC 1 EC** solution has cleared the last sprinkler head.

SPECIFIC INSTRUCTIONS FOR PUBLIC WATER SYSTEMS

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

CROP USE DIRECTIONS

Crop	fl oz/A (lb ai/A)	Application
For growth and lodging management and yield protection in cereals.		
Cereals	10.5-14.4 (0.08-0.11)	<p>Single application: Apply AVALAIRE T-PAC 1 EC from Feekes growth stage 4 (pseudostem erection) through Feekes growth stage 7 (node formation). Apply before Feekes 8 (when the last leaf is visible).</p> <p>[Optional language: Split application: Make the first application at Feekes 4-5 and a second application at Feekes 7. Apply no more than 14.4 fl oz/A total.]</p> <p>[Optional language: Split application in barley: Make the first application at Feekes 4-6 and a second application at Feekes 7-8.]</p> <p>[Optional language: For improved root development, apply 6 – 14.4 fl oz at Feekes 2-5 (tillers formed to leaf sheath strongly erect).]</p> <p>For further descriptions of Feekes (and Zadoks) growth stages, see table at end of label.</p> <p>Use the higher rate when 1) varieties are prone to lodging, or 2) the crop is intensively managed.</p>
Wheat		
Winter		
Spring		
Durum		
Barley		
Winter		
Spring		
Oats		
Rye		
Triticale		
<p>Application: For best coverage and uptake, use a minimum of 10 gallons of water/acre. AVALAIRE T-PAC 1 EC may be mixed in a spray solution containing up to 50% liquid nitrogen fertilizer.</p> <p>Specific Use Restrictions:</p> <ol style="list-style-type: none"> 1) Do not apply if crop is stressed by drought, disease, or temperatures. 2) Do not apply more than 14.4 fl oz (0.11 lb ai) AVALAIRE T-PAC 1 EC/A/year. 3) AVALAIRE T-PAC 1 EC may be applied until 45 days prior to harvest (45-day PHI). 		

Crop	fl oz/A (lb ai/A)	Application
For yield protection and lodging prevention in grasses grown for seed.		
Grasses (grown for seed)	12-64 (0.09-0.5)	<p>Apply as a broadcast, foliar spray to actively growing grass. For a single application, apply before or during stem elongation stage of development (Zadoks 30-37 or Feekes 5-8).</p> <p>Use the high rate on heavy, lush stands. Use the lower rate range on short varieties, when conditions are less favorable for lodging, or on older stands of grass.</p> <p>NOTE: Although this product is effective at any time in this growth stage the BEST timing is early (Zadoks growth stage 32 or Feekes 7) when the second node on the main stem is detectable.</p>
	Split application 6-32 (0.05-0.25)	For a split application, apply the first application before or during stem elongation stage of development (Zadoks 30-37 or Feekes 5-8) followed by a second application 7-10 days later.

Specific Use Restrictions:

- 1) Do not apply more than 64 fl oz (0.5 lb ai) **AVALAIRE T-PAC 1 EC/A/year**.
- 2) May be applied up to 35 days before harvest.
- 3) Do not graze or feed forage 49 days after last application.
- 4) Other crops may be planted 30 days after the last application.

Crop	fl oz/A (lb ai/A)	Application															
For yield protection and lodging prevention in rice.																	
Rice Including wild rice	3.5-5.7 (0.027-0.045)	<p>Apply AVALAIRE T-PAC 1 EC one time as a broadcast spray to actively growing rice at the stages specified in the table below. AVALAIRE T-PAC 1 EC may be applied via aerial or ground boom application (depending on when flooding takes place). Apply AVALAIRE T-PAC 1 EC (one application only) within the following growth stages.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Growth Stage</th> <th style="text-align: center;">BBCH code</th> <th style="text-align: center;">AVALAIRE T-PAC 1 EC Treatment</th> </tr> </thead> <tbody> <tr> <td>Fully tillered</td> <td style="text-align: center;">29</td> <td style="text-align: center;">Yes (earliest)</td> </tr> <tr> <td>Panicle Initiation (green ring)</td> <td style="text-align: center;">30</td> <td style="text-align: center;">Yes-Best</td> </tr> <tr> <td>Panicle Formation (panicle 1-2mm)</td> <td style="text-align: center;">32</td> <td style="text-align: center;">Yes (latest)</td> </tr> <tr> <td>Panicle Differentiation (jointing)/ ½- to ¾-inch internode elongation</td> <td style="text-align: center;">34</td> <td style="text-align: center;">NO-do not apply</td> </tr> </tbody> </table> <p>[Optional language: Use the high rate on heavy, lush stands and varieties prone to lodging. Use the lower rate range when conditions are less favorable for lodging.]</p> <p>NOTE: Delayed heading has been noted when AVALAIRE T-PAC 1 EC was applied later than panicle differentiation. As rice grows quickly, do not apply once internode is more than ½ - ¾ inch in length.</p>	Growth Stage	BBCH code	AVALAIRE T-PAC 1 EC Treatment	Fully tillered	29	Yes (earliest)	Panicle Initiation (green ring)	30	Yes-Best	Panicle Formation (panicle 1-2mm)	32	Yes (latest)	Panicle Differentiation (jointing)/ ½- to ¾-inch internode elongation	34	NO-do not apply
Growth Stage	BBCH code	AVALAIRE T-PAC 1 EC Treatment															
Fully tillered	29	Yes (earliest)															
Panicle Initiation (green ring)	30	Yes-Best															
Panicle Formation (panicle 1-2mm)	32	Yes (latest)															
Panicle Differentiation (jointing)/ ½- to ¾-inch internode elongation	34	NO-do not apply															

Specific Use Restrictions:

- 1) Do not apply more than 5.7 fl oz (0.045 lb ai/A) **AVALAIRE T-PAC 1 EC/A/year**.
- 2) Do not apply to ratoon crop.
- 3) Do not release flood water for 5 days after application.
- 4) Do not apply after 50 days pre-harvest (50-day PHI).

Crop	fl oz/A (lb ai/A)	Application
For ripening in sugarcane.		
Sugarcane	22.4-40 (0.18-0.31)	Apply AVALAIRE T-PAC 1 EC 28-60 days prior to harvest to increase sugar content and/or extend harvest window.
For internode shortening for seed piece production in sugarcane.		
Sugarcane	8-25.6 (0.06-0.2)	Make a minimum of two split applications of AVALAIRE T-PAC 1 EC . Make first application of 8 – 25.6 fl oz/A when 6 fully developed full size leaves have appeared. Note the bottom leaf should be feeding internodes above the soil surface. Make a second application of 8 – 25.6 fl oz /A when 6 additional fully developed full size leaves have appeared. The total amount applied per acre/crop/season must not exceed 40 fl oz.

Specific Use Restrictions:

- 1) When applied as a ripener, **AVALAIRE T-PAC 1 EC** may be applied until 28 days prior to harvest (28-day PHI).
- 2) Do not apply more than 40 fl oz (0.31 lb ai) **AVALAIRE T-PAC 1 EC/A/crop/year**.
- 3) Do not apply to cane under stress from lack of water, poor fertilization, abnormal temperatures, or disease.

Precautions:

- 1) Results may vary according to the variety.
- 2) Crop tolerance: **AVALAIRE T-PAC 1 EC** has been shown to be safe at the rates, timings, and varieties tested. Some varieties may be more sensitive and exhibit symptoms such as stunting. Under normal agricultural conditions, the affected plants will resume growth.

Conversion Table

Fl oz/A	lb ai/A
3.5	0.027
5.7	0.045
6	0.05
8	0.06
12	0.09
14.4	0.11
22.4	0.18
25.6	0.2
32	0.25
40	0.31
64	0.5

Explanation of Growth Stages for Gramineous Crops

Feekes	Zadoks	Description
2	21	Begin Tillering
3	26	Tillers formed
4	29	Leaf sheaths erect
5	30	Leaf sheaths strongly erect
6	31	First node visible
7	32	Second node visible
8	37	Flag leaf just visible

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 HANDLING:

[Nonrefillable container. Do not reuse or refill this container. If empty: Offer for recycling if available or discard in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.]

[For Commercial Uses]

[For plastic containers ≤ 5 gallons: 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 puncture and dispose of in a sanitary landfill, or by incineration.]

[For plastic containers > 5 gallons: 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. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following 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, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of AVALAIRE, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, AVALAIRE, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither AVALAIRE, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

[AVALAIRE T-PAC 1 EC] is a trademark of Avalaire, LLC
Slant, and Atticus Aquila XL are trademarks of Atticus, LLC.
Quilt, Tilt are registered trademarks of a Syngenta Group Company.
Viton® is a trademark of E.I. DuPont de Nemours and Company.

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

AVALAIRE T-PAC 1 EC™

[Alternate Brand Name: Zatopek 1 EC]

[For growth management of grasses grown for seed, wheat, triticale, barley, oats, rye, rice, and sugarcane]

ACTIVE INGREDIENT:	(% by weight)
Trinexapac-ethyl*	12.0%
OTHER INGREDIENTS:	<u>88.0%</u>
TOTAL	100.0%

*CAS No. 95266-40-3

AVALAIRE T-PAC 1 EC is an emulsifiable concentrate containing 1 pound of active ingredient per gallon.

Contains petroleum distillates.

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.)

FIRST AID	
If in eyes:	<ul style="list-style-type: none"> ● Hold eye open and rinse slowly and gently with water for 15-20 minutes. ● Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. ● Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> ● 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 on skin or clothing:	<ul style="list-style-type: none"> ● 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 swallowed:	<ul style="list-style-type: none"> ● Immediately call a poison control center or doctor. ● Do not induce vomiting unless told to do so by a poison control center or doctor. ● Do not give any liquid to the person. ● Do not give anything by mouth to an unconscious person.
NOTE TO PHYSICIAN	
If ingested, lavage stomach with care to prevent aspiration of stomach contents. An aqueous suspension of activated charcoal can be given to absorb remaining toxicant. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

PRECAUTIONARY STATEMENTS

Hazards To Humans And Domestic Animals

WARNING/AVISO

Causes substantial but temporary eye injury. Harmful if absorbed through skin or inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

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 disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift from treated areas. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. See the Spray Drift Management section for further instructions on avoiding drift.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 HANDLING:

[Nonrefillable container.] Do not reuse or refill this container. If empty: Offer for recycling if available or discard in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.]

[For Commercial Uses]

[For plastic containers ≤ 5 gallons: 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 puncture and dispose of in a sanitary landfill, or by incineration.]

[For plastic containers > 5 gallons: 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. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]

See inside label booklet for additional Precautionary Statements and Directions for Use.

Manufactured for:
Avalaire, LLC
 1204 Village Market, #173
 Morrisville, NC 27560

EPA Reg. No.: 93930-36
EPA Est. No.: _____
NET CONTENTS: _____