PULL HERE TO OPEN

Palisade® XT

Escanee QR
para Español

syngenta®

Plant Growth Regulator

For growth management of grasses grown for seed, wheat, triticale, barley, oats, rye, rice, sugarcane, and clover grown for seed (ID, OR, and WA only)

Active Ingredient:

Trinexapac-ethyl*:	23.0%
Other Ingredients:	77.0%
Total:	100.0%

*CAS No. 95266-40-3

Palisade® XT is an emulsifiable concentrate (EC) containing 2 pounds of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

CAUTION / PRECAUCIÓN

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 additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1743
EPA Est. 39578-TX-1

SCP 1743A-L1A 0825
4253249

2.5 gallons

Net Contents

NOTES

TABLE OF CONTENTS

1.0 FIRST AID

PRECAUTIONARY STATEMENTS

2.0 PRECAUTIONARY STATEMENTS
- 2.1 **Hazards to Humans and Domestic Animals**
- 2.2 **Personal Protective Equipment (PPE)**
- 2.3 **User Safety Requirements**
- 2.4 **Engineering Controls**
- 2.5 **User Safety Recommendations**
- 2.6 **Environmental Hazards**
- 2.7 **Physical or Chemical Hazards**

DIRECTIONS FOR USE

3.0 PRODUCT INFORMATION

4.0 APPLICATION DIRECTIONS
- 4.1 **Methods of Application**
- 4.2 **Application Equipment**
  - 4.2.1 Nozzles and Pumps
- 4.3 **Application Volume and Spray Coverage**
- 4.4 **Mixing Directions**
  - 4.4.1 Palisade XT Alone
  - 4.4.2 Tank-Mix Precautions
  - 4.4.3 Tank-Mix Compatibility
  - 4.4.4 Palisade XT in Tank Mixtures
  - 4.4.5 Palisade XT + Quilt® Fungicide, Quilt Xcel®, Trivapro® Fungicide, or Tilt® Fungicide
  - 4.4.6 Spray Additives
- 4.5 **Application through Irrigation Systems (Chemigation)**
  - 4.5.1 Chemigation Restrictions
  - 4.5.2 Operating Instructions for Chemigation
  - 4.5.3 Specific Instructions for Public Water Systems
  - 4.5.4 Center Pivot Irrigation Equipment

5.0 ROTATIONAL CROP RESTRICTIONS

6.0 RESTRICTIONS AND PRECAUTIONS
- 6.1 **Use Restrictions**
- 6.2 **Use Precautions**
- 6.3 **Spray Drift Management**
  - 6.3.1 Aerial Applications
  - 6.3.2 Ground Applications
  - 6.3.3 Controlling Droplet Size
  - 6.3.4 Sensitive Areas
  - 6.3.5 Temperature Inversion
  - 6.3.6 Wind
  - 6.3.7 Equipment

continued…

DIRECTIONS FOR USE *(continued)*

7.0 CROP USE DIRECTIONS
- 7.1 **Cereal Grains Except Rice**
- 7.2 **Rice**
- 7.3 **Grasses Grown for Seed**
- 7.4 **Sugarcane**
- 7.5 **Clover Grown for Seed (ID, OR and WA only)**

8.0 STORAGE AND DISPOSAL

9.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

10.0 APPENDIX
- 10.1 **Explanation of Growth Stages for Gramineous Crops**

1.0 FIRST AID

FIRST AID
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
SYNGENTA HOTLINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**

PRECAUTIONARY STATEMENTS

2.0 PRECAUTIONARY STATEMENTS

2.1 Hazards to Humans and Domestic Animals

CAUTION / PRECAUCIÓN

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

2.2 Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

For aerial applications, mixers and loaders must also wear:

- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, or Viton™ ≥14 mils

2.3 User Safety Requirements

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.

2.4 Engineering Controls

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-f)), 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(f)).

2.5 User Safety Recommendations

User Safety Recommendations

Users should:

- 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. As soon as possible, wash thoroughly and change into clean clothing.

2.6 Environmental Hazards

For terrestrial uses: 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.

2.7 Physical or Chemical Hazards

Do not mix with or allow 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.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE, USE RESTRICTIONS, AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR PERFORMANCE, CROP INJURY, OR ILLEGAL RESIDUES.

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:

- Shoes plus socks
- Chemical-resistant gloves made of barrier laminate, polyvinyl chloride (PVC) ≥14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, butyl rubber ≥ 14 mils, or Viton™ ≥ 14 mils
- Coveralls

3.0 PRODUCT INFORMATION

Palisade XT 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. Applications to clover result in decreases in crop canopy height and reduced lodging, while reducing the length of time needed for the crop to reach harvest maturity. Palisade XT is rapidly absorbed by the foliage. The PGR effects do not occur through soil uptake.

The activity and performance of Palisade XT 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.

4.0 APPLICATION DIRECTIONS

All applications must be made according to the use directions that follow.

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.

4.1 Methods of Application

Palisade XT 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.

4.2 Application Equipment

4.2.1 Nozzles and Pumps

Nozzles

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles must 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 must 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.

Pumps

- Use a pump with capacity to:
  (1) maintain 35-40 psi at nozzles
  (2) 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.

4.3 Application Volume and Spray Coverage

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 water per acre can be used in grasses grown for seed, cereals, clover 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.

4.4 Mixing Directions

- 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.

4.4.1 Palisade XT Alone

- Add $^{1}/_{2}$-$^{2}/_{3}$ of the required amount of water to the spray or mixing tank.
- With the agitator running, add Palisade XT 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 Palisade XT has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

4.4.2 Tank-Mix Precautions

- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations and directions for use on all product labels involved in tank mixing. User must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
- Tank mixes of Palisade XT with other pesticides, fertilizers, or any other additives not specifically labelled for use with Palisade XT may result in tank mix incompatibility or unsatisfactory performance. In such cases, always check tank mix compatibility by conducting a jar test according to guidance in **Section 4.4.3** before actual tank mixing.

4.4.3 Tank-Mix Compatibility

- Conduct a jar test using a 1 pt to 1 qt container with lid by adding water or other intended carrier such as a liquid fertilizer to the jar.
- Next, add the appropriate amount of pesticides(s) or tank-mix partner(s) in their relative proportions based on specified label rates. Add tank-mix components separately in the order described in the tank-mixing section, **Section 4.4.4**. After each addition, shake or stir gently to thoroughly mix.
- After all ingredients have been added, put the lid on the jar, tighten and invert the jar 10 times to mix.
- After mixing, let the mixture stand 15–30 minutes and then examine for signs of incompatibility, including obvious separation, large flakes, precipitates, gels or heavy oily film on the jar.
- If the mixture remains mixed or can be remixed readily, it is physically compatible and can be used.
- If the mixture is incompatible, repeat the test using a compatibility agent at the specified label rate. Or, if applicable, slurry dry formulations in water before adding to the jar. If incompatibility is still observed after following these procedures, do not use the mixture.
- After compatibility testing is complete, dispose of any pesticide wastes in accordance with the storage and disposal section, **Section 8.0**, of this label.

4.4.4 Palisade XT in Tank Mixtures

- Palisade XT is usually compatible with all tank-mix partners listed on this label.
- To determine the physical compatibility of Palisade XT 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.
- Observe all directions for use, precautions, and limitations which appear on tank mix partner label.

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 Palisade XT to the spray tank.
- Allow Palisade XT to completely disperse.
- Spray the mixture with the agitator running.

4.4.5 Palisade XT + Quilt® Fungicide, Quilt Xcel®, Trivapro® Fungicide, or Tilt® Fungicide

- Add $^{1}/_{2}$-$^{2}/_{3}$ of the required amount of water to the spray tank.
- While agitating, add Quilt Fungicide (azoxystrobin + propiconazole; EPA Reg. No. 100-1178), Quilt Xcel (azoxystrobin + propiconazole; EPA Reg. No. 100-1324), Trivapro Fungicide (azoxystrobin + propiconazole + benzovindiflupyr; EPA Reg. No. 100-1613), or Tilt Fungicide (propiconazole; EPA Reg. No. 100-617), followed by Palisade XT.
- Continue agitation while adding the remainder of the water.
- Maintain agitation until all of the mixture has been applied.

4.4.6 Spray Additives

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.

4.5 Application through Irrigation Systems (Chemigation)

4.5.1 Chemigation Restrictions

- Apply this product only through center pivot. Do not apply this product through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 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: Palisade XT is corrosive to many seal materials. Teflon seals are best. Silicone and Santoprene can be used, but must be replaced once a year. Do not use Buna-N, Neoprene, Viton, or PVC seals.

4.5.2 Operating Instructions for Chemigation

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.

4.5.3 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 (RPZ), backflow preventer 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

4.5.4 Center Pivot Irrigation Equipment

Notes: (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating Palisade XT 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 Palisade XT 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 Palisade XT required to treat the area covered by the irrigation system.
- Add the required amount of Palisade XT 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 Palisade XT 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 Palisade XT solution has cleared the sprinkler head.

5.0 ROTATIONAL CROP RESTRICTIONS

The following crops may be planted at the specified interval following application of Palisade XT.

Crop	Plantback Interval
Wheat Barley Triticale Oats Rye Rice Grasses Grown for Seed Sugarcane Clover	0 days
All Other Food or Feed Crops	30 days

6.0 RESTRICTIONS AND PRECAUTIONS

6.1 Use Restrictions

- **DO NOT** apply through any ultra-low volume (ULV) spray system.
- **DO NOT** exceed the maximum application rates listed in **Section 7.0**.

6.2 Use Precautions

- Application is not recommended if crops are stressed by drought, disease, or temperatures.
- When applying, avoid spray overlap as crop injury may occur.

6.3 Spray Drift Management

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER. 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.

6.3.1 Aerial Applications

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. 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.

6.3.2 Ground Applications

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

6.3.3 Controlling Droplet Size

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.

6.3.4 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 non-labeled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas.

6.3.5 Temperature Inversion

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. The 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.

6.3.6 Wind

Avoid making applications when spray particles may be carried by air currents to non-target 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.

6.3.7 Equipment

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

7.0 CROP USE DIRECTIONS

7.1 Cereal Grains Except Rice

Crops (including cultivars, varieties, and/or hybrids of these)			
Wheat Winter Spring Durum		**Barley** Winter Spring	**Oats** **Rye** **Triticale**
Application Purpose	**Rate fl oz/A (lb ai/A)**	**Application Timing**	**Use Directions**
Growth and lodging management and yield protection.	3.5 – 7.0 (0.06 – 0.11)	Single application: Apply Palisade XT from Feekes growth stage 4 (pseudostem erection) through Feekes growth stage 7 (node formation). Apply before Feekes 8 (when the last leaf is visible). Split application: Make the first application at Feekes 4-5 and a second application at Feekes 7. Apply no more than 7.0 fl oz/A total. Split application in barley: Make the first application at Feekes 4-6 and a second application at Feekes 7-8.	For further descriptions of Feekes (and Zadoks) growth stages, see table in **Section 10.1**. Use the higher rate when varieties are prone to lodging or the crop is intensively managed. For best coverage and uptake, use a minimum of 10 gallons of water/acre. Palisade XT may be mixed in a spray solution containing up to 50% liquid nitrogen fertilizer. Avoid applications if crop is stressed by drought, disease, or temperatures. Avoid making applications after Feekes 8 as an undesirable crop response could occur.
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate: DO NOT** apply more than 7.0 fl oz (0.11 lb ai) per acre. 3) **Maximum Annual Rate: DO NOT** apply more than 7.0 fl oz (0.11 lb ai) per acre per year. 4) **DO NOT** make more than 2 applications per year. 5) **Minimum Retreatment Interval:** 7 days 6) **Preharvest Interval (PHI):** 45 days 7) Not registered for use by California			

7.2 Rice

<table>
<tr><th colspan="4">Crops (including cultivars, varieties, and/or hybrids of these)</th></tr>
<tr><th colspan="4">Rice, wild rice</th></tr>
<tr><th>Application Purpose</th><th>Rate fl oz/A (lb ai/A)</th><th>Application Timing</th><th>Use Directions</th></tr>
<tr><td>Yield protection and lodging prevention</td><td>1.5 – 2.9 (0.024 – 0.045)</td><td>Make one application only within the following growth stages.
<table>
<tr><th>Growth Stage</th><th>BBCH code</th><th>Palisade XT Treatment</th></tr>
<tr><td>Fully tillered</td><td>29</td><td>Yes (earliest)</td></tr>
<tr><td>Panicle Initiation (green ring)</td><td>30</td><td>Yes- Best</td></tr>
<tr><td>Panicle Formation (panicle 1-2mm)</td><td>32</td><td>Yes (latest)</td></tr>
<tr><td>Panicle Differentiation (jointing)/ 1/2- to 3/4-inch internode elongation</td><td>34</td><td>NO – do not apply</td></tr>
</table></td><td>Apply one time as a broadcast spray to actively growing rice. Palisade XT may be applied via aerial or ground boom application (depending on when flooding takes place).
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.</td></tr>
<tr><td colspan="4">Precautions:
• Delayed heading has been noted when Palisade XT was applied later than panicle differentiation. As rice grows quickly, do not apply once internode is more than 1/2 - 3/4 inch in length.</td></tr>
<tr><td colspan="4">USE RESTRICTIONS</td></tr>
<tr><td colspan="4">1) Refer to Section 6.1 for additional product use restrictions.
2) Maximum Single Application Rate: DO NOT apply more than 2.9 fl oz (0.045 lb ai) per acre.
3) Maximum Annual Rate: DO NOT apply more than 2.9 fl oz (0.045 lb ai) per acre per year.
4) DO NOT make more than 1 application per year.
5) DO NOT apply to ratoon crop.
6) DO NOT release flood water for 5 days after application.
7) Preharvest Interval (PHI): 50 days</td></tr>
</table>

7.3 Grasses Grown for Seed

Crops (including cultivars, varieties, and/or hybrids of these)			
Grasses grown for seed			
Application Purpose	**Rate fl oz/A (lb ai/A)**	**Application Timing**	**Use Directions**
Single application for yield protection and lodging prevention in grasses grown for seed.	6.0 – 32.0 (0.09 – 0.5)	For a single application, apply when grasses are actively growing, recommended before or during stem elongation stage of development (Zadoks 30-37 or Feekes 5-8).	Apply as a broadcast, foliar spray to actively growing grass. 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.
Split application for yield protection and lodging prevention in grasses grown for seed.	Split application 2.5 – 15.4 (0.04 – 0.24)	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.	Apply as a broadcast, foliar spray to actively growing grass.
Precautions: 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.			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate: DO NOT** apply more than 32 fl oz (0.5 lb ai) per acre. 3) **Maximum Annual Rate: DO NOT apply more than** 32 fl oz (0.5 lb ai) per acre per year. 4) **DO NOT** make more than 2 applications per year. 5) **Minimum Retreatment Interval:** 7 days 6) Other crops may be planted 30 days after the last application. 7) **DO NOT** graze or feed forage 49 days after last application. 8) **Preharvest Interval (PHI):** 35 days 9) Not registered for use by California			

7.4 Sugarcane

Crops (including cultivars, varieties, and/or hybrids of these)			
Sugarcane			
Application Purpose	**Rate fl oz/A (lb ai/A)**	**Application Timing**	**Use Directions**
Ripening	11.5 – 19.8 (0.18 – 0.31)	Apply 14-60 days prior to harvest to increase sugar content and/or extend harvest window.	Apply as a broadcast, foliar spray.
Internode shortening for seed piece production in sugarcane and management of lodging	4.5 – 12.8 (0.07 – 0.2)	Make a minimum of two split applications. Make the first application 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 when 6 additional fully developed, full-size leaves have appeared.	Apply as a broadcast, foliar spray.
Precautions: Crop tolerance: Palisade XT has been shown to be safe at the rates, timings, and varieties tested. Some varieties may be more sensitive and exhibit symptoms, including stunting. Under normal agricultural conditions, the affected plants will resume growth. Results may vary according to the variety.			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate: DO NOT** apply more than 19.8 fl oz (0.31 lb ai) per acre. 3) **Maximum Annual Rate: DO NOT** apply more than 19.8 fl oz (0.31 lb ai) per acre per year. 4) **DO NOT** make more than 3 applications per year. 5) **Minimum Retreatment Interval:** 7 days 6) **DO NOT** apply to cane under stress from lack of water, poor fertilization, abnormal temperatures, or disease. 7) **Preharvest Interval (PHI):** 14 days 8) Not registered for use by California			

7.5 Clover Grown for Seed (ID, OR, and WA only)

Crops (including cultivars, varieties, and/or hybrids of these)			
Clover			
Application Purpose	**Rate fl oz/A (lb ai/A)**	**Application Timing**	**Use Directions**
Single application for growth management	7.7 – 28.0 (0.12 – 0.44)	Apply immediately at or just after stem elongation stage of development (BBCH 32). Although this product is effective at any time during stem elongation, for best results apply during early BBCH 32.	Apply as a broadcast, foliar spray to actively growing clover. Avoid applications if crop is stressed by drought, disease, or temperatures.
Split application for growth management	7.7 – 14.0 (0.12 – 0.22)	For a split application, apply the first application at or just after stem elongation stage of development (BBCH 32). Second application is advised to be made near BBCH 50 (initial bud development).	Apply as a broadcast, foliar spray to actively growing clover. Avoid applications if crop is stressed by drought, disease, or temperatures.
Precautions: Crop tolerance: Palisade XT has been shown to be safe at the rates, timings, and varieties tested. Some varieties may be more sensitive and exhibit symptoms, including stunting. Under normal agricultural conditions, the affected plants will resume growth. Results may vary according to the variety.			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) Only for application to clover grown for seed production in OR, WA, and ID 3) **DO NOT** apply to white clover. 4) **Maximum Single Application Rate: DO NOT** apply more than 28.0 fl oz (0.44 lb ai) per acre. 5) **Maximum Annual Rate: DO NOT** apply more than 28.0 fl oz (0.44 lb ai) per acre per year. 6) **DO NOT** make more than 3 applications per year. 7) **Minimum Retreatment Interval:** 7 days 8) **Preharvest Interval (PHI): Clover grown for seed and forage -** 30 days 9) **Preharvest Interval (PHI): Clover grown for hay –** 52 days 10) **Livestock Grazing Restriction** – 30 days			

8.0 STORAGE AND DISPOSAL

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, they must be disposed of according to federal, state, or local procedures. Contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Handling (less than or equal to 5 gallons)

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or 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, or by other procedures approved by state and local authorities.

Container Handling (greater than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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 puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling (greater than 5 gallons)

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

9.0 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.

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. Crop injury, ineffectiveness or other unintended consequences 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 SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

10.0 APPENDIX

10.1 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

Palisade®, Quilt®, Tilt®, Quilt Xcel®, Trivapro®, the ALLIANCE FRAME
the Syngenta Logo and the PURPOSE ICON
are Trademarks of a Syngenta Group Company

Viton™ is a trademark of The Chemours Company FC, LLC.

©2026 Syngenta

For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-866-796-4368.

Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 1743A-L1A 0825
4253249

Palisade® XT

Plant Growth Regulator

For growth management of grasses grown for seed, wheat, triticale, barley, oats, rye, rice, sugarcane, and clover grown for seed (ID, OR, and WA only)

Active Ingredient:

Trinexapac-ethyl*:	23.0%
Other Ingredients:	77.0%
Total:	100.0%

*CAS No. 95266-40-3

Palisade® XT is an emulsifiable concentrate (EC) containing 2 pounds of active ingredient per gallon.

See additional precautionary statements and directions for use inside booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1743

EPA Est. 39578-TX-1

Palisade® and the Syngenta logo are trademarks of a Syngenta Group Company

©2026

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-866-796-4368.

SCP 1743A-L1A 0825
4253249

(01) 0 07 02941 01206 6

KEEP OUT OF REACH OF CHILDREN.

CAUTION/PRECAUCIÓN

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

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

SYNGENTA HOTLINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call **1-800-888-8372**.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION / PRECAUCIÓN

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Environmental Hazards: For terrestrial uses: 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 with or allow contact with oxidizing agents. Hazardous chemical reaction may occur.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, they must be disposed of according to federal, state, or local procedures. Contact your state pesticide or environmental control agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

Container Handling: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or 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, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

2.5 gallons

Net Contents

syngenta®