Tanos™ Fungicide

GROUP	11	27	FUNGICIDE

DRY FLOWABLE

FOR SALE FOR USE ON POTATOES, FIELD TOMATOES AND CANEBERRIES ONLY

AGRICULTURAL

REGISTRATION NO. 27435 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: Famoxadone 25%
Cymoxanil 25%

Warning, contains the allergen sulfites.

USE RESTRICTION: Do not apply Tanos™ Fungicide to more than 100 ha per day.

WARNING – POISON
EYE IRRITANT

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 2.5-5 kg

Production Agriscience Canada Company
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Chatham, Ontario
N7M 5L1
519-352-6350

PRECAUTIONS

- **KEEP OUT OF REACH OF CHILDREN**
- Harmful or fatal if swallowed.
- Avoid contact with food, drink and livestock feed material.
- **May irritate eyes. Avoid contact with eyes.**
- Avoid contact with skin, eyes or clothing.
- Wash thoroughly with soap and water after handling.
- Wear chemical resistant coveralls over long-sleeved shirt and long pants, goggles or face shield and chemical resistant gloves during mixing, loading, application, cleanup and repair.
- Remove contaminated clothing and wash clothing before reuse.
- For potatoes: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. For field tomatoes: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. For caneberries: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 9 days.
- Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.
- When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank mix. Follow the more stringent label precautionary measures for mixing, loading and application stated on both product labels.

FIRST AID

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

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

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

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

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

For medical emergencies call 1-800-441-3637 (24 hours).

TOXICOLOGICAL INFORMATION: Treat Symptomatically.

ENVIRONMENTAL HAZARDS

1. TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.
2. This product is toxic to birds and wild mammals, and is harmful to beneficial arthropods, such as predators and parasitoids.
3. The best available technique which minimizes off-target drift, should be used to reduce effects on wildlife in field boundary.
4. Do not apply to areas that are vulnerable to runoff. If rainfall is imminent, delay spraying.

DIRECTIONS FOR USE

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

Aerial application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) fine classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotorspan.

BUFFER ZONES

Use of the following spray methods or equipment DO NOT require a buffer zone: hand-held or backpack sprayer and spot treatment, inter-row hooded sprayer, low-clearance hooded or shielded sprayers that ensure spray drift does not come in contact with orchard crop fruit or foliage, soil drench and soil incorporation.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of application	**Crop**		**Buffer Zones (metres) Required for the Protection of:**	
			Freshwater Habitat of Depths:	**Terrestrial habitat**
			Less than 1 m	
Field sprayer	Potatoes, field tomatoes and caneberries		1	1
Aerial	Potatoes, field tomatoes and caneberries	Fixed wing	5	15
		Rotary wing	3	15

* Buffer zones for the protection of terrestrial habitats are not required for use on rights-of-way including railroad ballast, rail and hydro rights-of-way, utility easements, roads, and training grounds and firing ranges on military bases.

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

GENERAL INFORMATION

Tanos™ Fungicide is a protectant and locally systemic fungicide recommended for use as a spray, for the control of early and late blight on potatoes and field tomatoes.

Apply as a spray with ground or air assisted equipment, except as otherwise directed, using sufficient water to obtain thorough coverage of plants.

Do not apply Tanos Fungicide to more than 100 ha/day.

DO NOT USE ON GREENHOUSE TOMATOES.

Not for use in home plantings nor once any commercial crop is turned into U-pick, Pick-Your-Own or similar operation.

CROP SAFETY AND VARIETAL SENSITIVITY
Tanos Fungicide must not be applied to any crop suffering from stress as a result of drought, water logging, low temperatures, insect attacks, nutrient or lime deficiency or other factors reducing crop growth.

INTEGRATED PEST MANAGEMENT
Production Agriscience Canada Company recommends the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an integrated Pest Management (IPM) program, which can include biological, cultural, and genetic practices, aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when blight forecasting models reach locally determined action levels. Consult your provincial extension service, professional consultants or other qualified authorities to determine the appropriate management, cultural practice and treatment threshold levels for the specific crop, geography and diseases.

RESISTANCE MANAGEMENT RECOMMENDATIONS
For resistance management, Tanos Fungicide is a group 11 and 27 (famoxadone and cymoxanil) fungicide. Any fungal population may contain individuals naturally resistant to Tanos Fungicide and other group 11 and/or 27 fungicides. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance:

- Alternate with fungicides having a different mode of action other than group 11 and 27 after each application of Tanos Fungicide.
- A maximum of three applications per year
- Use tank mixtures with fungicide/bactericides from a different group that is effective on the target pathogen when such use is permitted.
- Fungicide use should be based on an IPM program that includes scouting, historical information related to pesticide use and crop rotation and considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide/bactericide applications.
- Monitor treated fungal/bacterial populations for resistance development. Notify Production Agriscience Canada Company if reduced sensitivity of the pathogen to Tanos Fungicide is suspected.
- If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another (fungicide/bactericide) with a different site of action, if available.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and IPM recommendations for specific site and pest problems in the area.
- For further information or to report suspected resistance, contact your local Production Agriscience Canada Company representative or the Production Agriscience Canada Company hotline at 1-800-667-3852 for further information

APPLICATION INFORMATION

PESTICIDE HANDLING

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Ensure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the job at hand.
- Avoid overfilling of spray tank.

- Do not discharge excess material on the soil at a single spot in the field/grove or mixing/loading station.
- Dilute and agitate excess solution and apply at labelled rates/uses.
- Do not store pesticides near well sites.
- When triple rinsing the pesticide container, ensure the rinsate is added to the spray mix.

MIXING INSTRUCTIONS

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of Tanos Fungicide.
3. Continue agitation until the Tanos Fungicide is fully dispersed, at least 5 minutes.
4. Once the Tanos Fungicide is fully dispersed, maintain agitation and continue filling tank with water. Tanos Fungicide should be thoroughly mixed with water before adding any other material.
5. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly reagitate before using.
6. Apply Tanos Fungicide spray mixture within 12 hours of mixing to avoid product degradation.

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Production Agriscience Canada Company at 1-800-667-3852 for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by Production Agriscience Canada Company.

CROP ROTATION RESTRICTIONS

Crops that are on the Tanos Fungicide label may be planted back at any time; cereal grains may be planted back following a minimum plantback interval of 30 days; and all other crops may be planted back following a minimum plantback interval of one year.

COMPATIBILITY

Since formulations may be changed and new ones introduced, it is recommended that users premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.). Avoid mixtures of several materials and very concentrated spray mixtures.

Tank mix solutions containing boron may affect solubility of the product. When using boron containing solutions in a tank mix, follow these procedures:

- Add the correct amount to Tanos Fungicide first
- Introduce boron containing solutions last

APPLICATION TIMINGS

- Make the first application of Tanos Fungicide following one to two applications of a preventative broad spectrum fungicide such as chlorothalonil or mancozeb.
- Make the second application no less than 12 days after the first; a third application may be made no less than 24 days after the second.
- Apply Tanos Fungicide in a preventative program.
- When using Tanos Fungicide in a fungicide program, a recommendation is to alternate with other fungicides to manage resistance.
- Utilize sufficient water to obtain thorough coverage.
- Ground - Conventional - no less than 250 - 300 l/ha
  - Air assisted - no less than 110 l/ha

RAINFASTNESS

Tanos Fungicide rapidly penetrates into plant tissues and is rainfast within 12 hours after application.

USE RATES AND APPLICATION INSTRUCTIONS

Crop	Disease	Rate (g/ha)	Spray Interval	Maximum No. Applications per year	PHI (days)	REI (hours)
potato	**early blight** (*Alternaria solani*)	560 - 840	A minimum **12 day application interval** must pass between the 1st and 2nd application of Tanos Fungicide. A minimum **24 day application interval** must pass between the 2nd and 3rd application of Tanos Fungicides other than Tanos may be used as necessary to protect the crop during these intervals.	3	14	24
field tomato	**late blight** (*Phytophthora infestans*)	560			3	12

PHI = preharvest interval
REI = restricted entry interval

Overspray or drift to sensitive habitats must be avoided. Do not contaminate these habitats when cleaning and rinsing spray equipment or containers.

A maximum of 3 applications per year is recommended for resistance management. Alternate with fungicides having a different mode of action other than group 11 and 27 after each application of Tanos Fungicide.

POTATO
Apply by air with a minimum water volume of 50 L/ha

Initial applications should start when local conditions indicate that Late Blight is imminent: A minimum **12 day application interval** must pass between the 1st and 2nd application of Tanos Fungicide. A minimum **24 day application interval** must pass between the 2nd and 3rd application of Tanos Fungicides other than Tanos may be used as necessary to protect the crop during these intervals.

Apply no more than 3 applications per crop. Do not apply within 14 days of harvest.

Refer to other sections of this label for additional application instructions and/or use precautions.

AERIAL APPLICATION LABEL INSTRUCTIONS
DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) fine classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotor span.

Apply only by fixed-wing or rotary aircraft equipment, which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Use Precautions for Aerial Application
Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the **National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides**.

Operator Precautions for Aerial Application
Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted. It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, chemical-resistant coveralls and goggles or face shield during mixing/loading, cleanup and repair.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Specific Precautions for Aerial Application
Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-667-3852 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following: Apply the recommended rate in a minimum spray volume of 50 litres per hectare.

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than The Production Agriscience Canada Company and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. The Production Agriscience Canada Company itself makes no representation or warranty with respect to product performance (efficacy) and crop tolerance (phytotoxicity) claims for this product when used on the crops listed below. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold The Production Agriscience Canada Company harmless from any claims based on efficacy or phytotoxicity in connection with the uses described below.

FOR USE ON CANEBERRIES (including blackberry; raspberry, red and black; wild raspberry; loganberry; cultivars and hybrids of these.):
For control of Caneberry Spur blight (*Dydimella applanata*), cane botrytis (*Botrytis cinerea*), Caneberry anthracnose (*Elsinoe veneta*), and preharvest fruit rot (*Botrytis cinerea*), apply Tanos Fungicide at the rate of 840 grams/hectare. Use a sufficient water volume to ensure thorough coverage of the crop (250-800 L/ha)

Apply to foliage and fruit. A minimum 12 day application interval must pass between the 1st and 2nd application of Tanos Fungicide. A minimum 24 day application interval must pass between the 2nd and 3rd application of Tanos Fungicide.

Make no more than 3 applications per year.

Preharvest interval is 9 days.

Restricted entry interval is 9 days.

Use ground equipment only.

Refer to other sections of this label for additional application instructions and/or use precautions.

SPRAY DRIFT MANAGEMENT
The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVOURABLE ENVIRONMENTAL CONDITIONS

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage.

Important factors to consider when trying to minimize the potential for spray drift are:
a) droplet size (spray volume, pressure and nozzle type)
b) boom height (minimized above crop)
c) wind (spray between wind speeds of 5 to 15 kilometres per hour)
d) temperature and humidity (large droplets reduce evaporation).

SPRAY TANK CLEANOUT
Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water. Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation.
Dispose of waste rinse water by applying to a portion of the treated field.

STORAGE
Store product closed in original container only. Protect against humid air and water. Not for use or storage in or around the home. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Keep container tightly closed.

DISPOSAL
Do not reuse this container for any purpose. This is a recyclable container and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For information on the disposal of the unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER
This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

The seller warrants that the purchase by the buyer and the use of this product, as such, will not infringe any Canadian patent.

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Label Code: CN-27435-001-E

Specimen Label Notes
Name change from Tanos 50 DF to Tanos