

U.S. ENVIRONMENTAL PROTECTION AGENCY

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

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:

FEB 9 200

Term of Issuance: Conditional

82542-9

Name of Pesticide Product:

Tebuconazole 45 DF Fungicide

Name and Address of Registrant (include ZIP Code):

Source Dynamics, LLC 10039 E. Troon North Drive Scottsdale, AZ 85262

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 conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

Page 1 of 3

Signature of Approving Official:

Mary L. Waller

2/9/2009

Mary L. Waller, Product Manager (21)

Fungicide Branch, Registration Division (7505P)

EPA Form 8570-6

- 2. Make the following changes to the label:
 - a. In the list of ingredients change "INERT INGREDIENTS" to "OTHER INGREDIENTS"
 - b. In the Spanish language warning change "...en detaile." to "...en detaile."
 - c. At the bottom of the first page add "Produced for:" immediately above "Source Dynamics, LLC"
 - d. Change the product registration number to "EPA Reg. No. 82542-9".
 - e. In the section **HAZARDS TO HUMANS AND DOMESTIC ANIMALS** delete the sentence "Prolonged frequently repeated...in some individuals."
 - f. In the section **ENVIRONMENTAL HAZARDS**:
 - 1. Change the first sentence to read "This pesticide is toxic to mammals, fish and aquatic invertebrates."
 - 2. Add the following paragraphs at the end of the section:

"Ground Water Advisory: Tebuconazole is known to leach through soil into ground under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

Surface Water Advisory: This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted within 48 hours."

g. In the **AGRICULTURAL USE REQUIREMENTS** box change "...restricted entry interval (REI) of 12 hours." to "...restricted entry interval (REI). The REI for each crop is listed in the application directions associated with each crop."

h. Under GENERAL INFORMATION:

- 1. Change "Aerial application is not allowed on Long Island, New York." to "Do not apply by aerial application on Long Island, New York."
- 2. In the subsection **Mixing** change "Add recommended amount..." To "Add specified amount..."

- i. In all of the boxes listing the directions for use change the header from "RECOMMENDED APPLICATIONS" to "APPLICATION DIRECTIONS"
- j. In the **APPLICATION DIRECTIONS** box for Cherry, Peach, etc. add "Restricted-entry interval (REI) = 5 days"
- k. In the **APPLICATION DIRECTIONS** box for Grape:
 - 1. Add "Restricted-entry interval (REI) = 12 hours"
 - 2. Change "GENEREAL USE DIRECTIONS" to "GENERAL USE DIRECTIONS"
- 1. In the **APPLICATION DIRECTIONS** box for Banana and Plantain add "Restricted-entry interval (REI) = 12 hours"
- 3. You must submit an amendment or notification to comply with Pesticide Registration Notice 2007-4 by February 28, 2009.
- 4. Submit one copy of the revised final printed label for the record before the product is released for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A copy of the label stamped "Accepted with Comments" is enclosed for your records.

Mary L. Waller

Product Manager (21)

Fungicide Branch

Registration Division (7505P)

Mary L. Waller

Enclosure:

Label stamped "Accepted with Comments"
Product Chemistry Review DP358000 dated January 15, 2009
Acute Toxicity Similarity Clinic Determination DP358002 dated January 7, 2009

TEBUCONAZOLE 45 DF Fungicide

ACTIVE INGREDIENT:	
Tebuconazole: α -[2-(4-chlorophenyl)ethyl]- α -(1,1-dimethylethyl)-1 H -1,2,4-triazole-1-ethanol	. 45.0%
INERT INGREDIENTS:	::5.0%,
TOTAL	100.0%

STOP - Read the label before use.

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 detaile. (TO THE USER: If you do not understand the label, find someone to explain it to you in detail.)

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 center or doctor for treatment advice.	
If swallowed	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.	
If on skin or clothing	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.	
If inhaled	 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. 	
	cian: No specific antidote. Treat symptomatically. The compound does not cause any definite would be diagnostic. Contact with the eyes may cause irritation.	
	uct container or label with you when calling a poison control center or doctor, or going for treatment. y Medical Assistance, call the National Pesticide Information Center 1-800-858-7378.	

Source Dynamics, LLC 10039 E. Troon North Drive Scottsdale, AZ 85262

EPA Registration No. 84235-x

EPA Est. No.

Net Contents

ACCEPTED
with COMMENTS
In EPA Letter Dated

FEB 9 2009

Under the Federal Insecticide, Fundicide, and Redemicide Act to amended, for the pesticide registered und to FA Reg. No.

82542-9

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Causes substantial but temporary eye injury. Harmful if swallowed, inhaled or absorbed through the skin. Prolonged frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, and clothing. Avoid breathing spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA Chemical Resistant Category Selection Chart.

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- · Chemical-resistant gloves made of any waterproof material
- · Shoes plus socks
- Protective eyewear

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

ENGINEERING CONTROLS 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 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- · Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to estuarine and marine invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

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 restrictedentry interval and notification to workers. 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 into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

- Coveralls
- · Chemical-resistant gloves made of any waterproof material
- · Shoes plus socks
- Protective eyewear

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking or material is spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with handling of this material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

Container Disposal

Completely empty container into application equipment. Then dispose of liner in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

Spray Volume: Tebuconazole 45 DF may be applied in 50 gallons or more of spray solution per acre by ground spray equipment or in 15 gallons or more per acre by aircraft equipment except as noted under "REMARKS" for each crop. Increase spray volume as crop growth increases to ensure thorough coverage of the foliage and fruit. Check equipment calibration frequently. Complete coverage and uniform application are essential for the most effective results, especially when lower spray volumes are applied.

Aerial application is not allowed on Long Island, New York.

Chemigation: Do not apply this product through any type of irrigation system.

Mixing: Add recommended amount of Tebuconazole 45 DF to the spray tank while filling with water to the desired level. Maintain agitation while mixing. If other materials are added to the spray tank, be sure that the Tebuconazole 45 DF is thoroughly dispersed before other materials are added.

Compatibility: To determine the compatibility of Tebuconazole 45 DF with other mixing partners, use the following procedure:

Pour the recommended proportions of the products into a suitable container of water, mix thoroughly and allow to stand at least five (5) minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible. For further information contact your local SOURCE DYNAMICS, LLC representative.

RECOMMENDED APPLICATIONS				
CROP	DISEASE	RATE OF TEBUCONAZOLE 45 DF		
Cherry Peach Nectarine	Brown rot (blossom blight, fruit rot	2 oz/100 gallons*	4 – 8 oz/acre**	
Cherry	Leaf spot Powdery mildew			
Peach	Rust	2 oz/100 gallons	5 – 8 oz/acre	

Blossom blight: Begin application at white bud on cherry or pink bud on peach and nectarine. Apply again at 50% bloom and at petal fall if conditions continue to be favorable for disease development.

Fruit rot: Begin application at two to three weeks before harvest and continue at 7-day intervals through the day of harvest. The blossom and fruit stages must be protected for optimum control of brown rot. If Tebuconazole 45 DF is applied during only one of these stages, another registered fungicide should be applied to the other stage to provide optimum protection. Additional cover sprays during the early postbloom period are also important for preventing quiescent fruit infections in sweet cherry and peach.

Leaf spot: Begin applications at petal fall or when first leaves unfold and continue applications at 7- to 14-day intervals. Applications should be made at 7-day intervals early in the growing season when terminal growth is rapid and/or under severe disease conditions. A postharvest application may be made to maintain control and reduce overwintering inoculum.

Powdery mildew: Follow leaf spot schedule until terminal growth ceases.

Rust: Begin applications after canker emergence and continue applications at 14-day intervals under severe disease conditions.

GENERAL USE DIRECTIONS:

Tebuconazole 45 DF may be applied up to and including the day of harvest (0-day PHI). Do not apply more than 3 lb of product per acre per crop season.

Tebuconazole 45 DF is a sterol demethylation inhibitor (DMI) fungicide. It may be applied in tank mix or alternated (every other spray application) with a non-DMI (protectant) fungicide as a resistance management strategy. Do not mix Tebuconazole 45 DF with other DMI fungicides.

- * When using the 2 oz/100 gallon rate, use at least 4 oz of Tebuconazole 45 DF per acre.
- ** The amount of Tebuconazole 45 DF required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees. For smaller trees, multiply 2 oz times the number of 100 gallons of spray solution required to thoroughly wet, to the point of runoff, one acre of the trees being treated. For concentrate sprays, apply the same amount of product per acre as would be applied in a dilute spray based on tree size and foliage volume, but not less than 4 ounces of Tebuconazole 45 DF per acre. Apply 6 to 8 ounces per acre of Tebuconazole 45 DF when severe disease conditions exist.

RECOMMENDED APPLICATIONS				
CROP	DISEASE	RATE OF TEBUCONAZOLE 45 DF		
Grape	Black rot Powdery mildew	4 oz per acre		

Powdery mildew: Apply in a preventive spray schedule. Make the first application of Tebuconazole 45 DF before bloom and continue applications using spray intervals of up to 21 days in low to moderate disease pressure. Use a 14-day schedule when disease pressure is severe.

Black rot:

<u>Preventive Schedule</u>: Make the first application at 1 – 3 inches of new shoot growth and continue at 7- to 14-day intervals through 5° Brix stage or until veraison (berry coloring) is complete. Apply at 1-inch new shoot growth and at 7- to 14-day intervals on highly susceptible varieties or under severe disease conditions. <u>Post-Infection Schedule</u>: A post-infection schedule may be followed from 1-inch new shoot growth through 5° Brix stage. Apply within 72 hours after the beginning of an infection period. Tebuconazole 45 DF applications using the preventive schedule if the post-infection schedule is discontinued.

Botrytis: Tebuconazole 45 DF, applied in a powdery mildew spray schedule, will enhance the activity of registered fungicides used for control of Botrytis bunch rot. Applications must be made on a 14-day schedule for suppression of Botrytis.

GENEREAL USE DIRECTIONS

Tebuconazole 45 DF may be applied up to 14 days before harvest. A maximum of 2 pounds of Tebuconazole 45 DF may be applied per acre per crop season. The minimum interval between applications is 7 days.

Tebuconazole 45 DF may be applied by ground only in the State of New York.

Apply product in sufficient water for thorough coverage of vines and fruit. Increase spray volume as vine growth increases.

Tebuconazole 45 DF is a sterol demethylation inhibitor (DMI) fungicide. It may be applied in tank mix or alternated (every other spray application) with a non-DMI (protectant) fungicide as a resistance management strategy. Do not mix Tebuconazole 45 DF with other DMI fungicides.

RECOMMENDED APPLICATIONS			
CROP	DISEASE	RATE OF TEBUCONAZOLE 45 DF	
Banana	Black leaf streak	3.2 oz per acre	
Plantain	Yellow sigatoka		

Apply specified dosage as a foliar spray in a minimum of 20 gallons of water per acre to assure thorough coverage of the plants. A spray oil recommended for use on banana or plantain should be utilized at 4.3 pints per acre in a tank mix with Tebuconazole 45 DF. Thoroughly mix Tebuconazole 45 DF in the spray solution prior to the addition of a spray oil. Make the first application before disease becomes established and repeat applications at 14-day intervals if necessary to maintain disease control.

Do not apply Tebuconazole 45 DF to non-bagged bananas. A maximum of 16 oz of Tebuconazole 45 DF may be applied per acre per harvest cycle. Tebuconazole 45 DF may be applied up to the day of harvest.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES AND COMMERCIAL FISH PONDS.

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 of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

Buffer Zone Requirements: For soil or foliar applications, do not apply by ground within 25 feet, or by air within 150 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

Recommendations for Aerial Applications: The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

Importance of Droplet Size: An important factor influencing drift is droplet size. Small droplets (<150 – 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure.

Spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

Wind Speed Restrictions: Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Restrictions During Temperature Inversions: Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Airblast (Air Assist) Specific Recommendations for Tree Crops and Vineyards: Airblast sprayers carry droplets into the canopy of trees/vines via a radially or laterally directed air stream. The following specific drift management practices should be followed:

- Adjust deflectors and aiming devices so that spray is directed only into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow the spray to go beyond the edge of the cultivated area. Turn off sprayer when turning at end rows.
- Spray only inward, toward the orchard or vineyard, for applications to the outside rows.

Runoff Management: Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

ROTATIONAL CROPS

Any crop not specified on this label may be planted into treated areas 120 days after last application.

IMPORTANT INFORMATION READ BEFORE USING PRODUCT

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. The Directions for Use of this product reflect the opinion of experts based on field use and tests. 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 SOURCE DYNAMICS LLC or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of SOURCE DYNAMICS LLC and Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SOURCE DYNAMICS LLC and Seller harmless for any claims relating to such factors.

SOURCE DYNAMICS, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SOURCE DYNAMICS LLC, and Buyer and User assume the risk of any such use. SOURCE DYNAMICS LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, SOURCE DYNAMICS LLC or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SOURCE DYNAMICS LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE, AT THE ELECTION OF SOURCE DYNAMICS LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT, OR COMPENSATION LIMITED TO DAMAGES NOT EXCEEDING THE FAIR MARKET PURCHASE PRICE, AND SHALL NOT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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