


84930-3

04-28-2011

1/41

 <p>U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460</p>	<p>EPA Registration Number:</p> <p>84930-34</p>	<p>Date of Issuance:</p> <p>APR 28 2011</p>
	<p>NOTICE OF PESTICIDE: <input checked="" type="checkbox"/> Registration <input type="checkbox"/> Reregistration (under FIFRA, as amended)</p>	
	<p>Term of Issuance: Conditional</p> <p>Name of Pesticide Product: Arc-TFan 4.5FL Fungicide</p>	
<p>Name and Address of Registrant (include ZIP Code):</p> <p>Arcana, LLC 3937 Cedarwood LN Johnstown, CO 80534</p>		
<p><small>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.</small></p>		
<p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered 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.</p> <p>This product is conditionally registered in accordance with FIFRA sec. 3 (c) (7) (A) provided that you:</p> <ol style="list-style-type: none"> 1. Submit/cite all data required for the registration/ reregistration of your product when the Agency requires all registrants of similar products to submit data; and submit acceptable responses required for reregistration of your product under FIFRA section 4. 2. Make the following label changes: <ol style="list-style-type: none"> (a) Change the EPA Registration Number to 84930-34 <p style="text-align: right;">(Continued)</p>		
<p>Signature of Approving Official:</p> <p><i>Shaja B. Joyner</i> Shaja B. Joyner, Product Manager 20 Fungicide Branch Registration Division (7504P)</p>	<p>Date:</p> <p>APR 28 2011</p>	

(b) Pages 1 and 21 – First Aid Box

Revise the statements to appear in bulleted format. Additionally, place First Aid inside of textbox on page 21.

(c) Page 2 – Environmental Hazards

Place language on page 3 inside of the text box so that appears on page 2. Or otherwise move the heading and text box to page 3, and incorporate language.

(d) Page 3 – Directions For Use

Add the words “Shake Well Before Using” and remove from page 4.

(e) Pages 3, 17, and 24 – Instructions

Add the word “General” prior to Instructions.

(f) Page 4 – 2nd paragraph

Bold the sentence: Use on all labeled non-bearing tree fruit and tree nuts.

(g) Pages 5 and 10- Almonds and Pecans

Add 1 day Post harvest Interval.

(h) Page 6 and 10- Beans and Soybeans

Move header to the next page for the respective crops.

(i) Page 6 – Apples – Remarks

In the first sentence of the Remarks box for Pre-Harvest use to control Post-Harvest disease, add a space between “to” and “3

(j) Page 7 – Beans – Remarks

Reformat the text in the Remarks box so that the line breaks do not leave one or two words stranded at the left margin.

(k) Page 15 – Sugar Beets – Remarks

Change the beginning of the second sentence in the Remarks box to read “Mix Arc-TFan 4.5FL Fungicide with a protectant fungicide . . . “

(l) Page 16 – Conifers – Remarks

For Pine, reformat the end of the last sentence in the Remarks box so that “a.i.)” is on the same line.

(m) Page 17 – Directions for Use Through Chemigation Systems

In the heading beginning “Use in California by chemigation only for . . . “, delete the line break between “strawberries, and . . . “ and “sugar beets.”

(n) Page 19 – Storage and Disposal – Container Handling

The text “Storage and Disposal Cont’d” appears in the middle of this section – delete it.

(o) Page 22- Engineering Controls and User Safety Recommendations

Place paragraphs inside of textbox.

(p) Page 24 – Instructions and Information

Change the last sentence of the “Tank Mixing Instructions” section to “Avoid application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, since they may cause degradation of the pesticide resulting in reduced performance.”

(q) Page 24- Turf Application

Remove the statement “Not for homeowner use. This statement is not enforceable.”

(s) Page 26 – Turf Application Table

In the Tees and Greens box for Anthracnose: basal and Anthracnose: foliar, add a horizontal line between “3.6 – 5.4” and “2-4”.

(t) Page 26 – Turf Application Table

In the Diseases box for Bermudagrass decline and Take-All-Patch, reformat so the disease names are appropriately hyphenated.

(u) Page 27 – Turf Application Table

In the Instructions box for Gray Leaf Spot change “preventative” to “preventive.”

(v) Page 27 – Turf Application Table

In the Instructions box for Pink Snow Mold change “chlorthalonil” to “chlorothalonil.”

(w) Page 31 – Foliar Application Table for Ornamentals

In the Instructions boxes for Ovulinia Blight and Powdery Mildews add a space between “to” and “14”.

(x) Page 32 – Foliar Application Table for Ornamentals

In the Instructions boxes for Stem, Crown and Root Rots add a space between “28” and “to”.

(y) Page 33 – Foliar Application Table for Ornamentals

In the Instructions boxes for “Plant or Cutting Diseases caused by: . . .” and “Bulb, Corm and Rhizome Rots caused by: . . .” change “mm” to “minutes.”

(z) Page 35 – Spray Preparation

In the third sentence, add a space between “Arc-TFan 4.5FL Fungicide” and “in”.


9/41

3. Submit one (1) copy of the revised final printed label 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 sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records. If you have any questions, contact Lisa Jones of my team at (703) 308-9424 or jones.lisa@epa.gov.

Sincerely,


Shaja B. Joyner
Product Manager (20)
Fungicide Branch
Registration Division (7504P)

Enclosure: Stamped copy of label

5/41

GROUP 1 FUNGICIDE

ARC-TFAN® 4.5FL Fungicide

ACTIVE INGREDIENT:

Thiophanate-methyl (dimethyl[1,2-phenylene]-bis(iminocarbonothioyl))
bis[carbamate])*45.0%

OTHER INGREDIENTS:55.0%

TOTAL100.0%

Contains 4.5 pounds thiophanate-methyl per gallon.

*Also known as dimethyl 4,4'-o-phenylenebis[3-thioallophanate]

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRSTAID

If Inhaled: Move 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 center or doctor for further 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 center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. Contact Chem-Trec at 1-800-424-9300 for emergency medical treatment information.

EPA Reg. No. 84930-34

EPA Est. No. _____

NET CONTENTS: _____ Gallons

Batch/Lot # _____

Manufactured for:
ARCANA LLC
P.O. Box 26
Timnath, CO 80547

041911

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**

APR 28 2011

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

84930-34

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if absorbed through the skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are nitrile and butyl rubber. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Handlers mixing, loading, and applying the product as a dip (including application of product in Kaolinite clay to conifer seedling roots) must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Chemical-resistant apron.

All other mixers, loaders, and applicators must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves,
- Chemical-resistant apron for mixers, loaders, and other handlers exposed to the concentrate.

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. Discard clothing and other materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS

When handlers use enclosed cabs 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 the WPS.

USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

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

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). Exemption: The Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. Do not enter or allow workers entry into treated areas during the restricted-entry interval (REI). The REI for each crop is listed in the directions for use associated with that crop. Exemption: If this product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. 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:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant footwear plus socks,
- Chemical-resistant headgear for overhead exposures.

INSTRUCTIONS AND INFORMATION

Apply ARC-TFAN 4.5FL FUNGICIDE with ground or aerial equipment, using sufficient volume of spray to provide thorough coverage. Continuous agitation is required to keep the material in suspension. Arcana LLC does not recommend tank mixes with highly alkaline pesticides, such as Bordeaux mixture or lime sulfur. No claim of compatibility with other pesticides is implied. Use the higher rate under conditions of severe disease pressure. Also, consult local State Extension Services for application schedules. Use the fl. oz./Acre rate for concentrate sprays (less than 400 gallons on apples, less than 300 gallons on stonefruit). Use the fl. oz./100 gal rate for dilute ground applications. For aerial

applications, use a minimum of 5 gallons/A for row crops, and a minimum of 10 gallons/A for tree crops. For ground applications use a minimum of 20 gallons/A for row crops and 30 gallons/A for tree crops. Higher spray volume will generally result in better coverage and better disease control. Lack of control when using below minimum spray volumes is solely at the risk of the applicator/user, including use of electrostatic sprayers.

Chemigation instructions follow. Do not apply through any irrigation system unless these instructions are followed.

Use on all labeled non-bearing tree fruit and tree nuts: ARC-TFAN 4.5FL FUNGICIDE may be used for control of the diseases listed on the label for these crops during the non-bearing years of new plantings, and on nursery stock. All use directions and limitations must be followed, except for the PHI, which is not applicable. Begin applications as disease is first observed or expected. Tank mixing with a protectant fungicide may provide additional resistance management.

SHAKE WELL BEFORE USING

RESISTANCE MANAGEMENT: To avoid the development of tolerant or resistant strains of fungi, always tank-mix ARC-TFAN 4.5FL FUNGICIDE with a fungicide of different chemistry, and/or alternate a fungicide of different chemistry with ARC-TFAN 4.5FL. DO NOT USE PRODUCTS CONTAINING THIABENDAZOLE OR OTHER PRODUCTS CONTAINING THIOPHANATE-METHYL IN COMBINATION, IN ROTATION, OR AS A SUBSTITUTE FOR ARC-TFAN 4.5FL FUNGICIDE AS THEY ARE OF SIMILAR CHEMISTRY AND WILL CONTRIBUTE TO THE DEVELOPMENT OF RESISTANCE. If after using ARC-TFAN 4.5FL FUNGICIDE according to label directions the treatment is not effective, a tolerant or resistant strain of fungi may be present. Discontinue the use of ARC-TFAN 4.5FL FUNGICIDE for at least one season. As long as these precautions are followed, ARC-TFAN 4.5FL FUNGICIDE can be useful for disease control, even if resistant strains are present.

Crop	Diseases	Fl. Oz. /Acre	Fl. Oz. / 100 gal	Remarks
Almonds Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.	Brown Rot Blossom Blight <i>Monilinia</i> Scab <i>Cladosporium</i> Jacket Rot <i>Monilinia</i> , <i>Sclerotinia</i> , <i>Botrytis</i> Leaf Blight <i>Seimatosporium</i>	20 - 30		Apply as needed between pink bud and petal fall. ARC-TFAN 4.5FL FUNGICIDE may be applied alone at pink bud for Brown Rot control. For all other applications, apply ARC-TFAN 4.5FL FUNGICIDE with a contact fungicide such as Ziram 76DF for broad-spectrum control and resistance management. Do not apply more than 60 fl oz of product (2.1 lbs a.i.)/A/year.

Crop	Diseases	Fl. Oz. /Acre	Fl. Oz. / 100 gal	Remarks
Apples Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.	Apple Scab <i>Venturia</i> Black Pox* <i>Helminthosponu</i> <i>m papulosum</i> Flyspeck <i>Zygothiala</i> Powdery Mildew <i>Podosphaera</i> Sooty Blotch <i>Gloeodes</i> Black Rot <i>Botryosphaeria obtusa</i> Brooks Fruit Spot <i>Mycosphaerella</i> White Rot* <i>Botryo sphaeria dothidia</i>	15-20 (in CA use 30)	3.75 - 5	Apply at 5 to 10 day intervals from green tip through petal fall; continue at 7 to 14 day intervals in cover sprays. Do not apply more than 80 fl oz of product (2.8 lbs a.i.)/A/year. Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use. Thorough coverage of the fruit is required. Application closer to harvest may provide better efficacy. For resistance management, do not use a benzimidazole fungicide (i.e. Mertect®) post-harvest following ARC-TFAN 4.5FL FUNGICIDE pre-harvest application.
	Pre-Harvest use to control Post-Harvest Diseases on Apples			
	Storage Rot Blue Mold <i>Penicillium expansum</i> Gray Mold <i>Botrytis cinerea</i> Bulls-Eye Rot <i>Neofabraea spp.</i>	1	3.75 - 5	Apply as a pre-harvest spray within 2 weeks to 3 days of harvest. Thorough coverage of the fruit is required. Application closer to harvest may provide better efficacy. For resistance management, do not use a benzimidazole fungicide (i.e. Mertect®) post-harvest following ARC-TFAN 4.5FL FUNGICIDE pre-harvest application. Application of a non-benzimidazole post-harvest fungicide such as Penbotec™ or Schior® will provide additional protection from post-harvest diseases. Do not apply more than 80 fl oz of product (2.8 lbs a.i.)/A/year. Pre-harvest interval: 1 day
Crop	Diseases	Fl.	Fl. Oz.	Remarks

		Oz. /Acre	/ 100 gal	
Beans, dry and succulent Including: Lima bean	White Mold <i>Sclerotinia</i> Gray Mold <i>Botrytis</i>	30 - 40 OR		For one application: Apply when 100% of plants have at least one open bloom or when conditions are favorable for disease development.
Snap bean Kidney bean Mung bean Navy bean Pinto bean Wax bean Broad bean Fava bean Asparagus bean Blackeyed pea Cowpea Sweet lupine White lupine White Sweet lupine Grain lupine Chick pea Garbanzo bean Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours for succulent beans and 3 days for dry beans.	Anthracnose <i>Colletotrichum</i>	20 - 30		OR For multiple applications: Make the first application when 10% to 30% of plants have at least one open bloom and follow with sequential applications on a 4 to 7 day interval. Apply prior to the development of disease for best results. Do not apply more 80 fl oz of product (2.8 lbs a.i.)/A/year. Pre-harvest Interval: California only, 14 days for succulent beans, 28 days for dry beans and lima beans. Pre-harvest Interval: all other States, 14 days for succulent beans and lima beans, 28 days for dry beans.

Crop	Diseases	Fl. Oz. /Acre	Fl. Oz. / 100 gal	Remarks
<p>Cucurbits: Cantaloupe, Casaba, Cucumbers, Melons, Pumpkins, Summer and Winter Squash, and Watermelons</p> <p>Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.</p>	<p>For all cucurbit applications</p>			<p>Do not apply more than 60 fl. oz. of product (2.1 lbs a.i.)/A/year from any combination of application timings.</p> <p>Pre-harvest interval: 1 day</p> <p>ARC-TFAN 4.5FL FUNGICIDE can be used in a tank mix with Penncozeb® (mancozeb) or chlorothalonil for additional disease control and resistance management. Follow resistance management guidelines under Directions for Use.</p>
	<p>Acremonium/ Cephalosporium Hypocotyl Rot</p>	<p>10</p>		<p>Apply in-furrow, on top of the seeds at planting. Do not use less than 10 gallons of water per acre.</p>
	<p>Anthracnose* <i>Colletotrichum</i> Gummy Stem Blight* <i>Didymella</i> Powdery Mildew <i>Erysiphe</i>, <i>Sphaerotheca</i> Target Spot* <i>Corynespora</i></p>	<p>10</p>		<p>Begin applications when plants begin to run or when disease first appears, and repeat at 7 to 14 day intervals or as needed.</p> <p>For Target Spot, use at 7 day intervals as needed.</p>
	<p>Belly Rots* <i>Rhizoctonia</i>, <i>Fusarium</i></p>	<p>10</p>		<p>Apply in sufficient volume to allow runoff to the soil. Will not control Pythium or Phytophthora.</p>
	<p>Suppression of Vine Decline <i>Monosporascus</i> Charcoal Rot <i>Macrophomina</i></p>	<p>10</p>		<p>Apply through buried drip irrigation (chemigation) to the root zone. For disease suppression, apply at 14 day intervals, beginning at emergence and continuing to harvest. Applications weekly or biweekly, beginning 4 to 6 weeks prior to harvest will also offer suppression, but may not be as effective as a season long program.</p>

Crop	Diseases	Fl. Oz. /Acre	Fl. Oz. / 100 gal	Remarks
Garlic (clove treatment)	Penicillium Clove Rot		20	Completely immerse garlic cloves in suspension for at least 5 minutes. Continuously agitate the solution tank by hydraulic or mechanical means. After treatment, remove cloves from solution and drain. Dry cloves after treatment and prior to planting.
Onions* Garlic (In furrow) Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.	White Rot <i>Sclerotium cepivorum</i>	40 Broad cast		Spray directly into the open furrow at the time of planting seed, sets or bulbs. Not for this use through any type of irrigation system. Do not apply more than 40 fl oz of product (1.4 lbs a.i.)/A/year.
Peanuts Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.	Early Leaf Spot <i>Cercospora</i> Late Leaf Spot <i>Cercosporidium</i> Rust <i>Puccinia</i> Limb Rot <i>Rhizoctonia</i> Web Blotch <i>Ascochyta</i>	10		Begin applications when disease first appears and repeat at 14 day intervals as needed. Do not apply more than 40 fl oz of product (1.4 lbs a.i.)/A/year. Pre-harvest interval: 14 days Do not use ARC-TFAN 4.5FL FUNGICIDE alone. Use only in combination with a non-benzimidazole fungicide such as Penncozeb® 75DF (mancozeb) at 1 1/2 lbs per acre or chlorothalonil. Follow resistance management guidelines under Directions for Use.

Crop	Diseases	Fl. Oz. /Acre	Fl. Oz. / 100 gal	Remarks
<p>Pecans Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.</p>	<p>Brown Spot <i>Cercospora</i> Downy Spot <i>Mycosphaerella</i> Liver Spot <i>Gnomonia</i> Powdery Mildew <i>Microsphaera</i> Scab <i>Fusicladium</i> Stem End Blight <i>Botryosphaeria</i> Zonate Leaf Spot <i>Cristulariella</i></p>	<p>20</p>		<p>Begin applications when first leaves are showing and repeat at 3 to 4 week intervals until shuck split. Do not apply after shuck split. Do not apply more than 60 fl oz of product (2.1 lbs a.i.)/A/year. Follow resistance management guidelines under Directions for Use.</p>
<p>Pistachios Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.</p>	<p>Shoot Blight <i>Botrytis</i>, <i>Botryosphaena</i></p>	<p>30 - 40</p>		<p>Apply at bloom. Apply in a minimum of 100 gallons per acre by ground or 20 gallons per acre by air. For aerial application, fly over every row or center. Do not apply more than 40 fl. oz. of product (1.4 lbs a.i.)/A/year.</p>
<p>Potatoes Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.</p>	<p>White Mold <i>Sclerotinia sclerotiorum</i></p>	<p>20 - 30</p>		<p>Make the first application at row closure to full bloom of the primary flower clusters (prior to petal drop). Repeat the application within 7 to 14 days and at 7 to 14 day intervals if conditions for disease development are favorable. Thorough coverage of the flowers, stems, and branches is essential for disease control. Use a minimum of 6 gallons/A for aerial application. Apply prior to the development of disease for the best results. Do not apply more than 80 fl. oz. of product (2.8 lbs a.i.)/A/year. Pre-harvest interval: 21 days. May be tank mixed with Penncozeb® (mancozeb) for Early and Late Blight control.</p>
<p>Crop</p>	<p>Diseases</p>	<p>Fl. Oz.</p>	<p>Fl.</p>	<p>Remarks</p>

		/Acre	Oz. / 100 gal	
Soybeans Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.	For all soybean applications			Do not apply more than 40 fl oz of product (1.4 lbs a.i.)/A/year. Pre-harvest interval: 21 days Do not graze or feed treated vines or hay to livestock.
	Anthracnose <i>Colletotrichum</i> Brown Spot <i>Septoria</i> Frogeye Leaf Spot <i>Cercospora</i> Pod and Stem Blight	10 - 20		Apply from full bloom to when pods are 1/8" to 1/4" in length. Make a Second application 14 to 21 days later. Do not make the second application later than 14 days after pods average 1/4" in length or when beans form in the pod. Use the high rate under severe disease pressure.
	Diaporthe, <i>Phomopsis</i> Purple Seed Stain <i>Cercospora</i>	20		FOR SEED BEANS ONLY---For seed quality, make a single application when beans form in the pod.
	White Mold <i>Sclerotinia</i>	15 - 20		Make one application at early bloom (R-1 to R-2 stage) followed by a second application 7 to 14 days later if conditions are favorable for continued disease pressure. Thorough coverage of the flowers, stems, and branches is essential for disease control. Use a minimum of 5 gallons water/A by air.
	Aerial Blight (suppression)	20		Make initial application when disease threatens and repeat 14 to 21 days later if needed.
Stone Fruit Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.	For all stone fruit applications			Do not apply more than 80 fl oz of product (2.8 lbs a.i.)/A/year. Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.
Apricots	Brown Rot Blossom Blight	20 - 30 (in CA use 30)	6.7 - 10	Apply at early bloom (red bud). Make a second application at full bloom. If needed under severe disease

16/41

	Fruit Brown Rot <i>Monilinia</i>			pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays.
Cherries Sweet and Sour	Brown Rot Blossom Blight	20 - 30 (in CA use 30)	6.7 - 10	Apply at early bloom (red bud). Make a second application at full bloom. If needed under severe disease
	Fruit Brown Rot <i>Monilinia</i>			pressure, apply additional sprays at 10 to 14 day intervals between full bloom and final pre-harvest sprays.
	Cherry Leaf Spot <i>Coccomyces</i>	22.5 - 30	7.5 - 10	Applications may be made at petal fall or before (when leaves first unfold) and at first, second, and third cover at 10 to 14 day intervals and one spray 14 to 21 days after harvest.
	Powdery Mildew <i>Podosphaera Sphaerotheca</i>	20 - 30 (in CA use 30) PLUS 22.5 - 30	6.7-10 PLUS 7.5-10	Apply at early bloom (early popcorn). Make a second application at full bloom. PLUS Apply at shuck fall and first cover.
Nectarines	Brown Rot Blossom Blight Fruit Brown Rot <i>Monilinia</i>	20 - 30 (in CA use 30)	6.7 - 10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. If needed under severe disease pressure, apply additional sprays at 10 to 14 day intervals between full bloom and final pre-harvest sprays.

Peaches	Brown Rot Blossom Blight Fruit Brown Rot <i>Monilinia</i>	20 - 30 (in CA use 30)	6.7 - 10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. If needed under severe disease pressure, apply additional sprays at 10 to 14 day intervals between full bloom and final pre-harvest sprays.
	Peach Scab <i>Cladosporium</i>	20 - 30 (in CA use 30) PLUS 22.5 - 30	6.7 - 10 PLUS 7.5-10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. PLUS Apply at shuck split and at first cover sprays.
Plums and Prunes	Brown Rot Blossom Blight Fruit Brown Rot <i>Monilinia</i>	20 - 30 (in CA use 30)	6.7 - 10	Apply at early bloom (green tip). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10 to 14 day intervals between full bloom and final pre-harvest sprays.
	Black Knot <i>Dibotryon</i>	20 - 30 (in CA use 30)	6.7 - 10	Apply at pre-bloom, petal fall, and at first, second, and third cover sprays at 10 to 14 day intervals.
	Leaf Spot <i>Coccomyces</i>	20 - 30 (in CA use 30)	6.7 - 10	Applications may be made at petal fall, shuck split, and at first, second, and third cover sprays at 10 to 14 day intervals and 1 spray 14 to 21 days after harvest.

Strawberries Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.	For all strawberry applications		Do not apply more than 80 fl oz of product (2.8 lbs. a.i.)/A/year. Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.
	Crown Rot* <i>Colletotrichum</i> spp. Suppression only	15 - 20	Begin applications after establishment of the transplants and continue through first bloom at 10 to 14 day intervals. Use the high rate if the fields have a history of <i>Colletotrichum</i> crown rot and/or conditions are favorable for development of the disease. Will not control <i>Phytophthora</i> species.
	Fruit Rot <i>Botrytis</i> Leaf Blight <i>Dendrophoma</i> Leaf Scorch <i>Diplocarpon</i> Powdery Mildew <i>Sphaerotheca</i>	15 - 20	Begin applications at early bloom and continue at 7 to 10 day intervals. Use the higher rate under conditions of severe disease pressure.

<p>Sugar Beets Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.</p>	For all sugar beet applications		Do not apply more than 60 fl oz of product (2.1 lbs a.i.)/A/year. Pre-harvest interval: 21 days. Follow resistance management guidelines under Directions for Use.
	Cercospora Leaf Spot <i>Cercospora</i>	10 - 20	Apply when conditions become favorable for disease development before the disease appears and follow with a non-benzimidazole fungicide within 14 days of application or as needed. ARC-TFAN 4.5FL FUNGICIDE should be tank mixed with a protectant fungicide such as Penncozeb® or super Tin® when resistant strains of <i>Cercospora</i> are present in the field. For areas east of the Rocky Mountains: Do not make more than one application of ARC-TFAN 4.5FL FUNGICIDE per season for <i>Cercospora</i> Leaf Spot.
	Powdery Mildew <i>Erysiphe</i>	10 - 20	Apply as soon as disease symptoms appear and follow with a non-benzimidazole fungicide at a 14 day interval or as needed. ARC-TFAN 4.5FL FUNGICIDE can be tank-mixed with sulfur products such as Microthiol® Disperss® at 5 to 10 lbs/A for additional disease control and resistance management.
<p>Triticale and Fall-seeded Wheat For this use in Idaho, Oregon, and Washington ONLY Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.</p>	Foot Rot, Strawbreaker, Eye Spot <i>Pseudocercospora</i>	20	Apply ARC-TFAN 4.5FL FUNGICIDE at the rate indicated in a single application by air or ground after tillering but before stem elongation has begun. Use sufficient water to obtain thorough coverage. Do not apply more than 20 fl oz of product (0.7 lb a.i.)/A/year. Do not cut for hay within 90 days of application. Do not allow livestock to graze in treated areas before harvest.

* Not for this use in California

NOTE: Do not exceed maximum rate of pounds of thiophanate methyl per acre with dilute sprays.

DIRECTIONS FOR USE ON CONIFERS
(Not for this use in California)

CROP	DISEASE	RATE (lb/A), MINIMUM GALLONAGE	REMARKS
Conifers (Pine) Austrian Red Scots Christmas Trees	Tip Blight <i>Diplodia</i>	20 fl oz per 100 gal/A	Apply at bud break. Repeat 10 to 14 days later, just before needles emerge from sheath; repeat again 10 to 14 days after needle emergence. Do not apply more than 60 fl oz of product (2.1 lbs. a.i.)/A/year.
(Fir) Douglas	Swiss Needle Cast <i>Phaenocarpa</i> Rhabdocline Needle Cast	20 fl oz per 50 gal/A	Apply initially in early May. Repeat at 4 week intervals. Do not apply more than 100 fl oz of product (3.5 lbs. a.i.)/A/year.
<ul style="list-style-type: none"> - Add a spreader/sticker to improve coverage. - Use minimum gallonage with mist-blower types of sprayers and higher gallonage with conventional sprayers. - Do not graze livestock in treated areas. - Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. 			
Conifers (seedling treatment) Longleaf	Brown Needle Blight <i>Scirrhia</i>	1.25 fl oz product per 9.5 oz. dry Kaolinite clay for seedling root	Wet seedling roots in clean water, then apply ARC-TFAN 4.5FL FUNGICIDE / Kaolinite mixture to wet roots. Do not apply mixture to seedling foliage
Loblolly Longleaf Slash	<i>Fusarium</i> and <i>Rhizoctonia</i> Root Rot	2.5 fl oz. product per 50 oz. Kaolinite clay, plus enough water to make a slurry	Thoroughly cover seedling roots with ARC-TFAN 4.5FL FUNGICIDE / Kaolinite slurry. Do not apply mixture to seedling foliage.
<ul style="list-style-type: none"> - During treatment, avoid excessive drying of roots or exposure to temperatures greater than 90°F or less than 32°F. - ARC-TFAN 4.5FL FUNGICIDE does not control Pythium or Phytophthora. - Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. 			

DIRECTIONS FOR USE THROUGH CHEMIGATION SYSTEMS

USE IN CALIFORNIA BY CHEMIGATION ONLY FOR BEANS, CUCURBITS (CANTALOPE, CASABA, CUCUMBERS, MELONS, PUMPKINS, SQUASH, WATERMELONS), PEANUTS, POTATOES, SOYBEANS, STRAWBERRIES, AND SUGAR BEETS.

INSTRUCTIONS

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move; or drip (mini-micro sprinklers, strip tubing, trickle) irrigation systems. 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.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

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.

Do not connect chemigation system (including greenhouse systems) used for pesticide irrigation to any public water system unless the pesticide label-prescribed safety devices for public water systems are in place. Public water system means a system for the provision of piped water for human consumption if such a 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.

SYSTEM REQUIREMENTS

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the 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. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

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. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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.

APPLICATION INSTRUCTIONS

Observe the requirements in the System Requirements section above.

Apply ARC-TFAN 4.5FL FUNGICIDE only through systems containing anti-syphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off.

Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.

Application of more than recommended quantities of irrigation water per acre may result in decreased product performance.

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well/pivot/injection unit to prevent spray being applied to this area.

Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

ARC-TFAN 4.5FL FUNGICIDE may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, is likely to cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

SPRAY PREPARATION:

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water. Prepare a suspension of ARC-TFAN 4.5FL FUNGICIDE in a mix tank. Fill the tank with 1/2 or 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of ARC-TFAN 4.5FL FUNGICIDE and then the remaining volume of water.

Sprinkler Irrigation - Notes

Observe all System Requirements and Application Instructions above.

Set sprinkler system to deliver a maximum of 0.4 inch of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of ARC-TFAN 4.5FL FUNGICIDE into the irrigation water line so as to deliver the desired rate per acre. The suspension of ARC-TFAN 4.5FL FUNGICIDE should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.

When treatment with ARC-TFAN 4.5FL FUNGICIDE has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

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

Where sprinkler distributed patterns do not overlap sufficiently, unacceptable disease control may result

Check local restrictions and requirements regarding sprinkler irrigation applications, as they may vary from state to state.

Drip (Mini-Micro Sprinklers, Strip Tubing, Trickle) Irrigation - Notes

Observe all System Requirements and Application Instructions above. A pesticide supply tank may enhance effectiveness.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in the original container in a dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal Instructions listed below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container.

For containers ≤ 5 gallons: Clean container 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 STORAGE AND DISPOSAL Cont'd. 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For containers > 5 gallons: Clean container 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ARCANA LLC or Seller, To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ARCANA LLC and Seller harmless for any claims relating to such factors.

ARCANA 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 abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or ARCANA LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARCANA 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, neither ARCANA LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ARCANA 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 THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ARCANA, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ARCANA LLC 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 ARCANA LLC.

25/41

GROUP 1 FUNGICIDE

ARC-TFAN 4.5FL FUNGICIDE

Turf & Ornamental Fungicide

ACTIVE INGREDIENT:

Thiophanate-methyl (dimethyl[1,2-phenylene)-bis(iminocarbonothioyl)]
bis[carbamate])*45.0%

OTHER INGREDIENTS:55.0%

TOTAL100.0%

Contains 4.5 pounds thiophanate-methyl per gallon.

*Also known as dimethyl 4,4'-o-phenylenebis[3-thioallophanate]

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRSTAID

If Inhaled: Move 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 center or doctor for further 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 center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. Contact Chem-Trec at 1-800-424-9300 for emergency medical treatment information.

EPA Reg. No.84930-

EPA Est. No. _____

NET CONTENTS: ____ Gallons

Batch/Lot # _____

Manufactured for:
ARCANA LLC
P.O. Box 26
Timnath, CO 80547

041911

PRECAUTIONARY STATEMENTS**HAZARDS TO HUMANS AND DOMESTIC ANIMALS****CAUTION**

Harmful if absorbed through the skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are nitrile and butyl rubber. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Handlers mixing, loading, and applying the product as a dip (including application of product in Kaolinite clay to conifer seedling roots) must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Chemical-resistant apron.

All other mixers, loaders, and applicators must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves,
- Chemical-resistant apron for mixers, loaders, and other handlers exposed to the concentrate.

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. Discard clothing and other materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS

When handlers use enclosed cabs 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 the WPS.

USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

DIRECTIONS FOR USE

SHAKE WELL BEFORE USING

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

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). Exemption: The Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. Do not enter or allow workers entry into treated areas during the restricted-entry interval (REI). The REI for each crop is listed in the directions for use associated with that crop. Exemption: If this product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. 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:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant footwear plus socks,
- Chemical-resistant headgear for overhead exposures.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box only apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not allow others to enter until sprays have dried.

INSTRUCTIONS AND INFORMATION

ARC-TFAN 4.5FL FUNGICIDE is a broad spectrum fungicide exhibiting preventative, curative, and systemic properties. It is useful on a wide variety of turf and ornamental disease problems. Apply ARC-TFAN 4.5FL FUNGICIDE with ground equipment, using sufficient volume of spray to provide thorough coverage. Use the higher rates under conditions of severe disease pressure. Also, consult local State Extension Services for application schedules.

Chemigation instructions follow Directions For Use. Read and follow these instructions carefully for this method of application.

Mixing instructions: Shake well before using. Some settling may occur during prolonged periods of non-use. When high pH tank mixes exist, minimize the interval between mixing and application. Buffering tank water to pH 6-7 before adding Arc-TFan 4.5FL Fungicide may enhance effectiveness. Add required amount of Arc-TFan 4.5FL Fungicide to partially filled tank (1/2 total volume), agitate by mechanical or hydraulic means, add tank mix product if used (see tank mix instructions below, agitate again and then add remaining required amount of water. Continual agitation will keep the material in proper suspension. For best results, use spray mixture the same day it is prepared.

Tank mixing instructions: ARC-TFAN 4.5FL Fungicide is compatible with most commonly used pesticides. If tank mixing with other materials, add products in the following order: wettable powders, dry flowables, liquid flowables, emulsifiable concentrates, and soluble materials such as fertilizers. No claim of compatibility with other products is implied. Do not tank mix with copper-containing materials or with highly alkaline pesticides, such as Bordeaux mixture or lime sulfur. Consult the intended tank mix partner product label for appropriate application rates and use instructions. Follow the label directions for the most restrictive of label precautions and limitations. This product may not be mixed with any product containing a label prohibition against such mixing. Read and observe the most restrictive precautionary statements and other information appearing on product labels used in mixtures. Avoid application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, since they may cause degradation of the pesticide resulting in reduced performance. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

RESISTANCE MANAGEMENT: To avoid the development of tolerant or resistant strains of fungi, always either tank-mix ARC-TFAN 4.5FL Fungicide with a fungicide of different chemistry, or alternate ARC-TFAN 4.5FL Fungicide with a fungicide of different chemistry. **DO NOT USE PRODUCTS CONTAINING THIABENDAZOLE OR OTHER PRODUCTS CONTAINING THIOPHANATE-METHYL IN COMBINATION, IN ROTATION, OR AS A SUBSTITUTE FOR ARC-TFAN 4.5FL FUNGICIDE AS THEY ARE OF SIMILAR CHEMISTRY AND WILL CONTRIBUTE TO THE DEVELOPMENT OF RESISTANCE.** If after using ARC-TFAN 4.5FL Fungicide according to label directions the treatment is not effective, a tolerant or resistant strain of fungi may be present. Discontinue the use of ARC-TFAN 4.5FL Fungicide for at least one season. As long as these precautions are followed, ARC-TFAN 4.5FL Fungicide can be useful for disease control, even if resistant strains are present.

TURF APPLICATION —Not for homeowner use. For use only by certified applicators or those under their immediate supervision. Do not apply with fixed wing or rotary aircraft. Not for use on turf being grown for sale or other commercial use as sod.

Do not enter or allow others to enter until sprays have dried.

For use on all fine turf applications such as commercial and residential lawns, parks, athletic fields, golf course greens, tees, and fairways, and cemeteries, consisting of cool and warm season grasses such as Bentgrass, Bluegrass, Bermudagrass, Fescue, Ryegrass, St.

Augustinegrass, Zoysiagrass, or their mixtures. When used in accordance with the label, ARC-TFAN 4.5FL FUNGICIDE is not phytotoxic to any of the above mentioned grasses. ARC-TFAN 4.5FL Fungicide has both preventive and curative activity, and is to be used for the prevention and control of the diseases mentioned below.

Ground Application: Apply ARC-TFAN 4.5FL Fungicide with properly calibrated hand held, mechanical or motorized spray equipment or by chemigation through appropriate sprinkler irrigation systems. Spray uniformly over the area to be treated. Apply specified amounts in sufficient water to obtain thorough coverage of treatment area (2-4 gal of finished spray per 1,000 sq ft is suggested). When treating golf greens, always treat aprons and approaches. Use the highest recommended rate under conditions of severe disease pressure. For best results, apply after mowing or do not mow for at least twelve hours after application.

Lightly water the treatment area with one to two tenths inch of water to move the fungicide into active root zone. Excessive irrigation may move ARC-TFAN 4.5FL Fungicide below active root zone and reduce application effectiveness. Green design and drainage will influence irrigation practices. When tank mixing with contact action fungicides for foliar diseases, allow applications to dry on leaf surfaces. Proceed with normal watering after sprays have dried.

General Restrictions

- Do not graze animals on treated turf.
- Do not feed clippings to livestock or poultry.
- Do not apply with fixed wing or rotary aircraft.
- Minimum retreatment interval on turf is 14 days.
- Do not enter or allow others to enter until sprays have dried.

Restrictions for use on residential or public turf (commercial and residential lawns, parks, athletic fields, cemeteries):

- do not apply more than 1.8 fl oz product/1000 ft² in one application
- do not apply more than 7.2 fl oz product/1000 ft² per year

Restrictions for use on golf courses (tees, greens, apron):

- Do not apply more than 5.34 fl oz product/1000 ft² in one application
- Do not apply more than 14.4 fl oz product/1000 ft² to tees or greens per year
- Do not apply more than 3.6 fl oz product/1000 ft² to fairways (except Florida) per year
- In Florida, do not apply more than 1.8 fl oz product/1000 ft² to fairways per year

Diseases	Rate: fl oz product/1,000 sq. ft.			Instructions
	Golf Courses**		Non Golf Course*	
	Tees & Greens	Fairways		
Anthracnose: basal <i>Colletotrichum graminicola</i> Anthracnose: foliar <i>Colletotrichum graminicola</i>	3.6 - 5.4 2 - 4	3.6	1.8	For prevention in historic areas of disease pressure, apply twice at 14 day intervals when soil temperature reaches 60°F. For curative control, apply when disease first appears and continue at 14 day intervals as needed. Rotations and/or tank mix combinations with chlorothalonil or triadimefon can be used.
Bermudagrass decline: <i>Gaeumannomyces graminis var. graminis</i> Take-All-Patch: <i>Gaeumannomyces graminis var. avenae</i>	3.6 - 5.4	3.6	1.8	Apply in mid-July or when disease symptoms first appear and repeat at 14 day intervals for suppression. Use higher rates under most severe disease pressure. Follow proper agronomic recommendations to maintain plant vigor.
Cool Season Brown Patch: <i>Rhizoctonia cerealis</i> Necrotic Ring Spot: <i>Leptosphaeria korrea</i> Spring Dead Spot: <i>Leptosphaeria korrea</i>	3.6 - 5.4	3.6	1.8	For prevention, apply in fall before turf has stopped all growth activity. Make second application in early spring when soil temperatures reach 55-60°F or when disease first appears. For curative action, apply when disease first appears in early spring and continue at 14 day intervals.
Coprinus Snow Mold: <i>Coprinus psychromorbidus</i>	3.6 - 5.4	3.6	1.8	Make 2 treatments at 21 day intervals in late fall to early winter, with the last application made just prior to first permanent snow cover.
Fusarium Blight: <i>Fusarium roseum, F. triticum</i>	3.6 - 5.4	3.6	1.8	Apply when disease first appears at 14 day intervals.

	Rate: fl oz product/1,000 sq. ft.			
	Golf Courses**		Non Golf Course*	
Diseases	Tees & Greens	Fairways		Instructions
Dollar Spot: <i>Moellerodiscus Lanzia</i> Large Brown Patch: <i>Rhizoctonia solani</i> Ascochyta Leaf Blight: <i>Ascochyta</i> Copper Spot: <i>Glococercospora sorghi</i> Fusarium patch: <i>Fusarium nivale</i> Red Thread: <i>Corticuni fuciforme</i> Zoysia Patch: <i>Rhizoctonia solani</i>	2 - 3.6	2 - 3.6	1.8	Apply when disease first appears and continue at 14 day intervals. Rotations and/or tank mix combinations with chlorothalonil, iprodione, or mancozeb can be used.
Gray Leaf Spot (Blast) <i>Pyricularia grisea</i>	3.6 - 5.4	3.6	1.8	Make preventative application before expected period of disease development. Continue applications at 14 day intervals.
Leaf Spot: <i>Drechlsera</i> Leaf, crown, and root diseases: <i>Bipolaris</i> , <i>Curvularia</i> , <i>Exserohilum</i>	3.6 - 5.4	3.6	1.8	Apply when disease first appears and make applications at 14 day intervals as needed. Rotations and/or tank mix combinations with chlorothalonil, iprodione, or mancozeb are recommended under severe conditions.
Pink Snow Mold: <i>Michrodochium nivale</i>	2 - 3.6	2 - 3.6	1.8	Apply in late fall to early winter before turf has stopped all growth activity. A second application may be used in combination with chlorthalonil, or thiram at recommended rates before snow cover or during spring thaw.

	Rate: fl oz product/1,000 sq. ft.			
	Golf Courses**		Non Golf Course*	
Diseases	Tees & Greens	Fairways		Instructions
Rusts: <i>Puccinia</i> , <i>Uromyces</i>	3.6 - 5.4	3.6	1.8	Make 2 applications at 14 day intervals when disease first appears. Rotations and/or tank mix combinations with chlorothalonil or mancozeb are recommended.
Stripe Smut: <i>Ustilago striiformis</i>	3.6 - 5.4	3.6	1.8	Apply at 14 day intervals when disease first appears. For prevention, apply in spring and fall.
Summer Patch: <i>Magnaporthe poae</i>	3.6 - 5.4	3.6	1.8	For prevention, make 3 applications starting late April or early May using 21 day intervals. Rotations and/or tank mix combinations may be used as part of the three application program. For suppression, apply at 14 day intervals when disease first appears.

* public turf (commercial and residential lawns, parks, athletic fields, cemeteries)

** In Florida, do not apply more than 1.8 fl oz product/1000 ft² per year to fairways

HORTICULTURAL APPLICATIONS

Nursery Greenhouse, Landscape & Interiorscape

Annual and Perennial Flowers, Bedding Plants, Foliage Plants, Ground Covers, plus Deciduous and Evergreen Trees and Shrubs

Do not apply this product in a way that will contact any person, pet, either directly or through drift. Keep people and pets out of the area during application.

Homeowners: For use on ornamentals only. Do not apply to home orchards/fruit trees. DO NOT ALLOW PEOPLE OR PETS TO ENTER THE TREATED AREA UNTIL SPRAYS HAVE DRIED.

Certified applicators: Do not enter or allow others to enter until sprays have dried.

Do not use fruit, nuts, or sap from treated trees as food or feed.

Not for homeowner use in New York State.

ARC-TFAN 4.5FL Fungicide is a broad spectrum systemic fungicide which controls a variety of foliar, stem, and root diseases on a wide range of commercially important plants. ARC-TFAN 4.5FL Fungicide is also effective as a pre-plant dip on cuttings and bulbs. For soil drench applications, best plant protection is achieved with preventative treatments repeated every 21 to 28 days. For foliar applications, begin treatments when disease first appears, or during

suspected periods of disease development. Make additional applications every 7 to 14 days or as otherwise instructed for the prevention or control of the listed diseases. Use of a wetting agent is recommended for plants that have leaves that are difficult to wet properly. Use of a spreader-sticker is recommended to enhance product performance in wet weather conditions or during periods of overhead irrigation. ARC-TFAN 4.5FL Fungicide may be used to control listed diseases on nonbearing "backyard" ornamental fruit and nut trees such as almond, apple, apricot, cherry, nectarine, peach, pecan, plum, and prune trees. ARC-TFAN 4.5FL Fungicide may be applied as a ground application using hand held, mechanical or motorized spray equipment, or as a chemigation spray or through an applicable sprinkler irrigation system; or as an aerial application where applicable. See specific instructions below.

Note: The "Directions For Use" of this product reflect the cumulative inputs from both historical field use and product testing programs. However, it is impossible to test this product on all species and cultivars. A preliminary trial is suggested on a small scale before a full treatment is applied to any plant type not shown on this label but found in a similar use site with a listed disease problem. Wait 5-7 days after treatment to evaluate results. This product is not recommended for use on Swedish Ivy (*Nephrolepis exhaltata*), Boston Fern (*Plectranthus australis*), and Easter Cactus (*Hatiora gaertneri*).

Some plants may occasionally show some sensitivity to ARC-TFAN 4.5FL Fungicide applications, primarily as seedlings. Symptoms rarely affect marketability of the plants. Please check compatibility under your conditions on small groups of plants to see if there is any sensitivity.

Application Instructions: Apply material with properly calibrated hand held, mechanical or motorized spray equipment or by chemigation thorough appropriate sprinkler irrigation, flood, or drip systems. Begin applications when disease first appears and repeat at 7-14 day intervals or as needed during the growing season. Use the shortest interval when conditions are unusually favorable for the development of disease. For hand held, mechanical, or motorized applications, mix 10 - 20 oz of ARC-TFAN 4.5FL Fungicide per 100 gal and apply as a full coverage spray to drip for the prevention and control of the diseases listed below. Spray volume may range up to 400 gallons of finished spray per acre depending upon plant species and plant growth stage. For applications through irrigation systems, refer to aerial use rates indicated in the foliar application chart. For small volume applications less than 100 gallons, divide recommended rate by 16 to get the number of teaspoons of ARC-TFAN 4.5FL Fungicide/gallon water.

Special Instructions For Proportional Injectors (e.g. Dosatron, Dosmatic, Anderson, and similar equipment): Determine the treatment rate as indicated below in the ground application column for crop and pathogen. Determine the injection ratio for the individual system to be used for application. For systems using a 1:100 ratio, measure and add the exact amount of specified material per 100 gallons to each gallon of water in a stock bucket or tank. For systems using a 1:200 ratio, multiply the specified amount per 100 gallons by 2. For systems using a 1:50 ratio, divide the specified amount per 100 gallons by 2. For systems using a 1:16 ratio, divide the specified amount per 100 gallons by 6. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time. An injection ratio of 1:100 is specified for most greenhouse and nursery systems.

Note: homeowners do not apply more than 51.4 fl oz product per acre per single application (1.2 fl oz per 1000 sq. ft.).

For cut flowers do not apply more than 14.2 fl oz ARC-TFAN 4.5FL Fungicide(0.5 lb a.i.) per acre per application.

FOLIAR APPLICATION

Diseases Controlled	Rate - fl oz product/100 gallons or per acre	Instructions
Anthracnose	10 - 20	Apply as buds break or at first sign of disease period. Repeat at 7 to 14 day intervals as needed during disease period.
Black Spot of Rose <i>Diplocarpon rosae</i>	10 - 20	Apply in early summer or at first sign of disease. Repeat at 7 to 14 days as needed during disease period.
Brown Rot and Blight <i>Monilinia</i> , <i>Sclerotinia</i> , <i>Whetzellinia</i>	10 - 20	Apply in late spring or at first sign of disease. Repeat every 7 to 14 days as needed during disease period.
Fusicladium and Venturia Leaf Scabs on: Crabapple, Hawthorn, Pear, Mountain Ash, Pyracantha, etc.	10 - 20	Apply as buds break. Repeat every 7 to 14 days as needed during disease period. Effective control requires coverage during leaf expansion. Rotations and/or tank mix combinations with mancozeb, chlorothalonil or propiconazole can be utilized.
Leaf Spots and Blights caused by: <i>Ascochyta</i> , <i>Blumeriella</i> , <i>Botrytis</i> , <i>Cercospora</i> , <i>Coccomyces</i> , <i>Corynespora</i> , <i>Curvularia</i> , <i>Didymellina</i> , <i>Entomosporium</i> , <i>Fabraea</i> , <i>Fusarium</i> , <i>Ramularia</i> , <i>Rhizoctonia</i> , <i>Marssonina</i> , <i>Mycosphaerella</i> , <i>Myrothecium</i> , <i>Phoma</i> ,	10 - 20	Apply when disease symptoms first appear. Repeat every 7 to 14 days as needed during disease period. Rotations and/or tank mix combinations with mancozeb or chlorothalonil can be utilized.

<i>Physalospora</i> , <i>Schizothyrium</i> , <i>Septoria</i> , <i>Sphaceloma</i>		
Ovulinia Blight	10 - 15	Apply as flowers open. Repeat every 7 to 14 days as needed during disease period.
Powdery Mildews <i>Erysiphe</i> , <i>Microsphaera</i> , <i>Phyllactinia</i> , <i>Podosphaera</i> , <i>Oidium</i> , <i>Sphaerotheca</i>	10 - 20	Apply when disease first appears and repeat every 7 to 14 days during disease period. Rotations and/or tank mix combinations with mancozeb or triadimefon can be utilized.
Rust Diseases caused by: <i>Puccinia</i> , <i>Gymnosporangium</i> , <i>Uromyces</i>	10 - 20	Apply in late spring or when symptoms first appear. Repeat every 7 to 14 days as needed during disease period. Rotations and/or tank mix combinations with mancozeb or chlorothalonil are directed.
Tip Blight of Pine <i>Sphaeropsis sapinea</i> , <i>Diplodia pinea</i>	15 - 20	Begin application in spring when new growth starts. Make a second application just before needles emerge from the sheath and a third application 14 days later. Thorough coverage is essential for optimal disease control.
Twig Blights, Cankers, and Diebacks <i>Diaporthe</i> , <i>Kabatina</i> , <i>Phoma</i> , <i>Phomopsis</i>	15 - 20	Apply when symptoms first appear. Repeat every 7 to 14 days as needed during disease period.

SOIL DRENCH APPLICATION

Germination of seedlings of some species and cultivars planted in soil drenched with ARC-TFAN 4.5FL Fungicide may be delayed slightly, but the plants typically recover, and will be protected from seedling root infection. Soil drenches on young plants may cause a slight chlorosis (yellowing) of lower leaves, but typically do not affect the upper foliage. Other plants may also show a temporary stunting.

Diseases Controlled	Rate - fl oz product/100 gallons or per acre	Instructions
<p>Stem, Crown, and Root Rots caused by: <i>Botrytis</i>, <i>Cylindrocladium</i>, <i>Fusarium</i>, <i>Gliocladium</i>, <i>Myrothecium</i>, <i>Penicillium</i>, <i>Ramularia</i>, <i>Rhizoctonia</i>, <i>Sclerotinia</i> Black Root Rot: <i>Thielaviopsis</i></p>	<p>10 - 20</p>	<p>Apply as a drench or directed spray using hand held, mechanical, or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler irrigation systems, after seeding or sticking of cuttings (7 oz) or after transplanting (11 to 14 oz) to propagation beds containers, pots, trays, or nursery or landscape beds at a rate to thoroughly soak the growing media through the root zone. A general guide is 0.25 to 3 pints of finished mixture per sq ft depending on the media type and depth (about 4 oz per 4 inch pot or 8 oz per 6 inch pot). Repeat every 21 to 28 days for adequate crop protection. Note: ARC-TFAN 4.5FL Fungicide does not control Pythium or Phytophthora. Tank mix combinations with metalaxyl, mefenoxam, etridiazole, fosetyl-Al or propamocarb are required for the control of Pythium and Phytophthora.</p>

PLANT DIP APPLICATIONS

Diseases Controlled	Rate fl oz product/100 gallons or per acre	Instructions
Plant or Cutting Diseases caused by: <i>Botrytis</i> , <i>Cylindrocladium</i> , <i>Fusarium</i> , <i>Gliocladium</i> , <i>Myrothecium</i> , <i>Penicillium</i> , <i>Ramularia</i> , <i>Rhizoctonia</i> , <i>Sclerotinia</i> , <i>Thielaviopsis</i>	10 - 20	Immerse plants or cuttings for 10 to 15 mm. Remove and allow to drain. Note: Follow accepted hygiene practices to minimize the introduction and spread of water borne bacterial and water mold fungal diseases.
Bulb, Corm, and Rhizome Rots caused by: <i>Botrytis</i> , <i>Cylindrocladium</i> , <i>Fusarium</i> , <i>Gliocladium</i> , <i>Myrothecium</i> , <i>Penicillium</i> , <i>Ramularia</i> , <i>Rhizoctonia</i> , <i>Sclerotinia</i> , <i>Thielaviopsis</i>	10 - 20	Soak cleaned bulbs for 15 to 30 mm in warm solution (80-85 °F). For storage disease prevention, treat bulbs preferably within 48 hours after digging. After treatment, dry well before storing. If bulbs are for forcing, treat bulbs that have been heat cured. Note: Follow accepted hygiene practices to minimize the introduction and spread of water borne bacterial and water mold fungal diseases.

**DIRECTIONS FOR USE THROUGH CHEMIGATION SYSTEMS
INSTRUCTIONS**

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move; or drip (mini-micro sprinklers, strip tubing, trickle) irrigation systems. 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.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

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.

Do not connect chemigation system (including greenhouse systems) used for pesticide irrigation to any public water system unless the pesticide label-prescribed safety devices for public water systems are in place. Public water system means a system for the provision of piped water for human consumption if such a 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.

SYSTEM REQUIREMENTS

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the 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. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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.

APPLICATION INSTRUCTIONS

Observe the requirements in the System Requirements section above.

Apply ARC-TFAN 4.5FL Fungicide only through systems containing anti-syphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off. Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.

Application of more than specified quantities of irrigation water per acre may result in decreased product performance.

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well/pivot/injection unit to prevent spray being applied to this area.

Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

ARC-TFAN 4.5FL Fungicide may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, is likely to cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

SPRAY PREPARATION:

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water. Prepare a suspension of ARC-TFAN 4.5FL Fungicide in a mix tank. Fill the tank with 1/2 or 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of ARC-TFAN 4.5FL Fungicide and then the remaining volume of water.

Sprinkler Irrigation - Notes

Observe all System Requirements and Application Instructions above.

Set sprinkler system to deliver a maximum of 0.4 inch of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of ARC-TFAN 4.5FL Fungicide into the irrigation water line so as to deliver the desired rate per acre. The suspension of ARC-TFAN 4.5FL Fungicide should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. When treatment with ARC-TFAN 4.5FL Fungicide has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

Do not apply when wind speed favors drift beyond the area intended for treatment. Where sprinkler distributed patterns do not overlap sufficiently, unacceptable disease control may result.

Check local restrictions and requirements regarding sprinkler irrigation applications, as they may vary from state to state.

Drip (Mini-Micro Sprinklers, Strip Tubing, Trickle) Irrigation - Notes

Observe all System Requirements and Application Instructions above. A pesticide supply tank may enhance effectiveness.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in the original container in a dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal Instructions listed below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container.

For containers ≤ 5 gallons: Clean container 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For containers > 5 gallons: Clean container 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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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. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ARCANA LLC or Seller, To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ARCANA LLC and Seller harmless for any claims relating to such factors.

ARCANA 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 abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or ARCANA LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT

41/41

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