

## DRY FLOWABLE FUNGICIDE/BACTERICIDE FOR AGRICULTURAL USE

# ACTIVE INGREDIENT: 61.3% Copper Hydroxide (CAS No. 20427-59-2)\* 61.3% OTHER INGREDIENTS: 38.7% TOTAL 100.0%

\*Metallic Copper (Cu2+) Equivalent is 40% by weight

# DANGER / PELIGRO

See Booklet for Precautionary Statements and Directions for Use

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label find someone to explain it to you in detail.)

	FIRST AID								
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15 to 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.								
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.								
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.								
	NOTE TO DEVELORAN. Probable musecal demage may contraindigete use of gestric layage								

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate use of gastric lavage

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For Chemical Emergency Spill Leak Fire Exposure or Accident Call CHEMTREC Day or Night

Domestic North America 800-424-9300; International 703-527-3887 (collect calls accepted)

EPA Registration No.: 80289-2

Manufacture by Isagro S.p.A. Centro Uffici San Siro Via Caldera 21 Milan, Italy EPA Establishment No.: 79558-ITA-1

Manufactured for Isagro USA, Inc. 430 Davis Drive, Suite 240 Morrisville, NC 27560

**NET CONTENTS: 10 pounds** 

Made in Italy





#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER - PELIGRO

Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust.

#### 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 chemicalresistance category selection chart.

Mixers, loaders, applicators, and other handlers must wear the following:

- long-sleeved shirt and long pants
- shoes plus socks
- goggles or faceshield
- chemical-resistant gloves such as Natural Rubber.

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 absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

#### 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. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be

hazardous to aquatic organisms in water adjacent to treated areas.

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### **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 adults, children or pets, 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 State or Tribal 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 protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, cation 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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. For at least seven days following the application of copper-containing products in greenhouses:

- At least one container or station designed specifically for flushing eyes is available in operating condition with the WPS-required decontamination supplies for workers entering the area treated with copper-containing products,
- Workers are informed orally, in a manner they can understand:
- that residues in the treated area may be highly irritating to their eyes,
- that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes,
   that if they do get residues in their eyes, they should immediately flush their eyes with the eye flush container that is located with the decontamination supplies and
- how to operate the eye flush container or eye flush station.

#### Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours without required PPE.

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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear (goggles or faceshield)

#### NONAGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides 40 CFR part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

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

#### PRODUCT INSTRUCTIONS

Kentan DF may be applied as an aerial, ground dilute or ground concentrate spray unless specifically directed otherwise in the specific crop use directions.

The per acre use rate of Kentan DF is applicable for both dilute and concentrate spraying. Depending upon the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to Minimum Recommended Spray Volume Table. Complete spray coverage is essential to ensure optimum performance from Kentan DF. When treating by aerial application or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial utilization.

Consult the Kentan DF label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g. 4 to 12 pounds and 7 to 10 days), the higher rates and shorter spray intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops.

#### **SPECIAL PRECAUTIONS**

- Kentan DF should not be applied in a spray solution having pH of less than 6.5 as phytotoxicity may occur.
- Do not tank mix Kentan DF with Aliette® fungicide for use on any registered crops or ornamentals unless appropriate precautions have been taken to buffer the spray solution because severe phytotoxicity may result. Use in accordance with the most restrictive of label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing.
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray cars, houses, lawn furniture, etc.
- Environmental conditions such as extended periods of wet weather, acid rain, etc. which alter the pH of the leaf surface may affect the performance of Kentan DF resulting in possible phytotoxicity or loss of effectiveness.
- Agricultural chemicals may perform in an unpredictable manner when tank mixed, especially where several products are involved. Reduced effect on pests or crop injury may occur. Unless directed on this label or by a state/local expert, it is advisable to test for compatibility and potential crop injury prior to full scale commercial utilization of a new tank mix: otherwise, do not tank mix.
- It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment, such as aluminum, rubber and some synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use.
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  Do not apply this product through any irrigation (chemigation) system using aluminum parts or components as damage to the system may occur. Such application is prohibited regardless of whether the irrigation system is flushed with water after use of this product.
- Apply this product only through one or more of the following types of systems: sprinkler, including center pivot, lateral move, traveler, big gun, or plastic pipe solid set system(s) which contain no aluminum parts or components. Do not apply this product through any other type of irrigation system.
- While volume is important in obtaining full spray coverage, often factors such as foliage density, environmental conditions and sprayer calibration have a greater impact. Always be sure that sprayers are calibrated to spray equipment manufacturer's specifications and environmental conditions are within those recommended by state and local regulatory authorities.
- When mixing, fill the spray tank one-half full with water. Add Kentan DF slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. DO NOT PREMIX OR SLURRY Kentan DF. Spreaders, stickers, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank or contact your chemical supplier. Observe the most stringent precautions and limitations on the label of all products in mixture.

#### FROST INJURY PROTECTION (Bacterial Ice Nucleation Inhibitor)

Application of KENTAN DF made to all crops listed on this label at the rates and stages of growth indicated on the label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (*Pseudomonas syringae*, *Erwinia herbicola* and *Pseudomonas fluorescens*) and may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

#### CROP LISES

CITRUS: Grapefruit, Kumquat, Lemon, Lime, Orange, Pummelo, Tangelo and Tangerine.

FIELD CROPS: Alfalfa, Barley, Oats, Peanut, Potato, Rice, Sugar Beet and Wheat.

SMALL FRUITS: Blackberry, Blueberry\*, Cranberry, Currant, Gooseberry, Raspberry and Strawberry.

TREE CROPS: Almond, Apple, Apricot, Avocado, Banana, Cacao, Cherry, Coffee, Filbert, Mango, Nectarine, Olive, Peach, Pear, Pecan, Persimmon, Pistachio, Plum, Prune, Quince and Walnut.

VEGETABLES: Bean, Beet, Beet Greens, Broccoli, Brussels Sprout, Cabbage, Cantaloupe, Carrot, Cauliflower, Celeriac, Celery, Cucumber, Eggplant, Greens (Collard, Mustard and Turnip), Endive, Escarole, Honeydew, Lettuce, Leek, Muskmelon, Okra, Onion/Garlic, Pea, Pepper, Pumpkin, Spinach, Squash, Tomato, Watercress and Watermelon.

VINES: Grape, Hops and Kiwi.

MISCELLANEOUS: Atemoya, Carambola, Chives, Dill, Douglas Fir, Ginseng, Guava, Litchi, Live Oak, Macadamia, Mamey Sapote, Papaya, Parsley, Passion Fruit, Pecan, Sugar Apple and Sycamore.

**GREENHOUSE AND SHADEHOUSE CROPS**: KENTAN DF may be used in greenhouses and shadehouses to control diseases on any crop on this label where physiology allows greenhouse or shadehouse culture. While specific directions are presented for Citrus, Cucumber, Eggplant, Pepper, and Tomato; general use may occur for any crop on this label where physiology allows greenhouse or shadehouse culture.

ORNAMENTALS: Specified as listed.

\*Except California

MINIMUM RECOMMENDED SPRAY VOLUME (GALLON PER ACRE) WHEN APPLYING KENTAN DF									
USE	AERIAL (gal/acre)	DILUTE	CONCENTRATE						
Vegetables	3	20	_						
Field Crops	3	20	_						
Small Fruits	5	150	50						
Vines	5	150	50						
Tree Crops	10	400	50						
Miscellaneous crops	10	150	50						
Citrus	10	800	100*						
Ornamentals	10	100	50						

<sup>\*</sup>When using pesticide application equipment such as Curtec® or other similar sprayers that are capable of obtaining thorough coverage at low volumes, application rates as low as 20 gallons per acre of spray volume may be used.

#### USE DIRECTIONS

The following specific instructions are based on general application procedures. The recommendations of your local State Agricultural Extension Service should be closely followed as to timing, frequency and number of sprays per season.

### CITRUS

KENTAN DF may be mixed with dry foliar nutritionals (micronutrients) to create "Shot Bag" mixes to meet the various nutritional requirements of citrus and provide disease protection as described on this label. KENTAN DF per acre rates in these mixes must not exceed the maximum directed label rates for disease control. Adding foliar nutritionals or other products to spray mixtures containing KENTAN DF and applying to citrus during the post-bloom period when young fruit are present may result in spray burn.

DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MIN. RETREATMENT INTERVAL (DAYS)	COMMENTS
Algal Spot, Melanose, Scab	2-7.87	3.15	12.6	7	Apply as prebloom and post bloom sprays. Use the higher rates when conditions favor disease development.
Greasy Spot, Pink Pitting	2-6	3.15	12.6	7	Apply in summer on expanded new flush and fruit. Repeat on subsequent flushes where disease pressure is severe. Use the higher rates when conditions favor disease development.
Alternaria Brown Spot	2-7.87	3.15	12.6	7	On susceptible varieties apply when the first spring flush appears and each flush thereafter. Application to fruit should start after two thirds of the petals have fallen and be repeated on a 7 to 21 day schedule. Use the higher rates when conditions favor disease development.
Phytophthora Brown Rot, Septoria Spot	2-7.87	3.15	12.6	7	Begin application in fall before or just after the first rain and continue as needed. For brown rot only, apply to skirts of trees to a height of at least 4 feet. For control of septoria spot or where fruit have already been infected with brown rot, apply to entire tree. Apply also to bare ground 1 foot beyond skirt. Use the higher rates when conditions favor disease development. NOTE: In California, in areas subject to copper injury, add 1/3 to 1 pound of high quality lime per 2 pounds of KENTAN DF.
Phytophthora Foot Rot	1	3.15	12.6	7	Mix with 1 quart of water, Tre-Hold® or latex paint. Paint trunks of trees from the soil surface to the lowest scaffold limbs. Apply in May prior to summer rains and/or in the fall prior to wrapping trees for freeze protection. Treatment serves as protection for up to 1 year, but does not cure existing infections. NOTE: Areas where microjet or low volume irrigation hit the tree trunk may require retreatment due to wash off.

CITRUS (continued)	CITRUS (continued)										
DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu²+/A)	MIN. RETREATMENT INTERVAL (DAYS)	COMMENTS						
Citrus Canker (Suppression)	2-7.87	3.15	12.6	7	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require an additional application. Number and timing of applications will be dependent upon disease pressure. Under heavy pressure, each flush of new growth should be sprayed.						

NOTE: Phytotoxicity may occur on young tender flush when KENTAN DF is applied to citrus seedlings grown in greenhouses or shadehouses.

#### CITRUS (FIELD NURSERY GROWN)

To control Melanose, Scab, Pink Pitting, Greasy Spot and Brown Rot and for suppression of Citrus Canker, apply 6 to 7.875 pounds of product per acre. Apply KENTAN DF at 28 day intervals depending on disease severity. The maximum single application rate is 3.15 pounds of Cu<sup>2+</sup> per acre. The maximum annual application rate is 12.6 pounds of Cu<sup>2+</sup> per acre. The minimum retreatment interval is 7 days.

FIELD CROPS						
CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS CU <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS CU <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Alfalfa	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	1.32	0.53	1.12	30	Apply 10 to 14 days before each harvest or earlier if disease threatens. <b>NOTE:</b> Spray injury may occur with sensitive varieties such as Lahontan.
Peanut	Cercospora Leaf Spot	1-1.97	0.79	4.74	7	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when conditions favor disease development. Flowable sulfur may be added.
Potato	Early Blight, Late Blight	1-4	2.5	25	5	Apply 1 to 2.5 pounds at 5 to 10 day intervals starting when plants are 2 to 6 inches high in locations where disease is light. Apply up to 4 pounds per acre when disease is more severe. Under conditions of severe disease, control with KENTAN DF will be improved by tank mixing with other compatible fungicides registered for use on potatoes. Read and follow all label instructions of tank mix partners.
Sugar Beet	Cercospora Leaf Spot Downy Mildew	2-3.27	1.31	7.86	10	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals. Use the higher rates when conditions favor disease development. Addition of a spreader/sticker is recommended.
Wheat, Barley, Oats	Helminthosporium Spot Blotch, Septoria Leaf Blotch	1-1.32	0.53	1.06	10	Make first application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease development.

CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Brambles (Aurora, Blackberry, Boysen, Cascade, Chehalem,	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	2-4	2.0	10	7	Make fall application after harvest. Apply de layed dormant spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added.
Logan, Marion, Raspberry, Santiam, Thornless Evergreen)	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	2	2.0	10	7	Apply when leaf buds begin to open and repea when flower buds show white. If needed agricultural-type spray oil may be added NOTE: Crop injury may occur if applied to fo liage under certain environmental conditions such as hot or prolonged moist periods. Discon tinue application if signs of crop injury appear.
Blueberry*	Bacterial Canker	2-5.25	2.1	8.4	7-30	Make first application before rain falls and a second application 4 weeks later. Use the higher rates when conditions favor disease development.
	Fruit Rot, Phomopsis Twig Blight	2-5	2.1	8.4	7	Dormant Application: Begin application: when bloom buds begin to swell. Make additional applications at 10 to 14 day intervals before blooms open.
Cranberry	Fruit Rot	4-5.25	2.1	12.6	7	Make first application in late bloom. Appl one or two additional applications at 10 to 1 day intervals depending on disease severity
	Rose Bloom	4-5.25	2.1	12.6	7	Apply three sprays on 7 to 14 day schedule as soon as symptoms are observed.
	Bacterial Stem Canker	4-5.25	2.1	12.6	7	Apply postharvest and again in spring at buswell. Apply one or two additional applications at 7 to 14 day intervals depending or disease severity.
	Leaf Blight, Red Leaf Spot, Stem Blight, Tip Blight (Monilinia)	4-5.25	2.1	12.6	7	Apply delayed dormant spray in the spring Repeat at 10 to 14 day intervals through prebloom.
Currant, Gooseberry	Anthracnose, Leaf Spot	6	4.0	16	10	Make initial application after first leaves have expanded. Continue on a 10 to 14 day schedule during wet conditions in the spring Make an additional application after harvest
Strawberry	Angular Leaf Spot, (Xanthomonas), Leaf Blight, Leaf Scorch, Leaf Spot, Downy mildew	1-3	1.2	8.19	7	Begin application when plants are established and continue on a weekly schedul throughout the season. Apply in at least 2 gallons of water. Use the higher rates where conditions favor disease development NOTE: Discontinue applications if signs corop injury appear.

TREE CROPS						
CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Almond only	Bacterial Blast (Pseudomonas)	0.4	1.5	18	5	For almond only: To control bacterial blast in sprinkler irrigated orchards or where disease is severe, apply post-bloom at 2 week intervals or just before sprinkling. NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlus varieties.
Almond, Apricot, Cherry, Plum, Prune	Bacterial Blast (Pseudomonas), Bacterial Canker, Coryneum Blight (Shot Hole)	6-16	8.0	18	7	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease development. If needed, agricultural-type spray oil may be added.  For cherries: Where disease is severe, an additional application shortly after harvest may be required.
	Blossom Brown Rot, Coryneum Blight (Shot Hole)	3.75	1.5	18	5	Apply during early bloom. Do not apply after full bloom or injury may occur.
	Black Knot (Plum)	3-3.75	1.5	18	5	Make an application at bud swell up to early bloom for early season disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use after full bloom.
	Cherry Leaf Spot (Sour Cherries Only)	3.75	1.5	18	5	Apply at petal fall as well as one to two times after petal fall. Do not apply to sweet cherry or the English Morello variety as severe injury will result. The addition of 1 to 3 pounds of hydrated lime per 2 pounds of KENTAN DF may reduce crop injury. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur from post-bloom applications.
Apple	Anthracnose, Blossom Blast, European Canker (Nectria), Shoot Blast (Pseudomonas)	10-16	8.0	16	n/a	Apply before fall rains. Use the higher rate when conditions favor disease development. Only one application is permitted. NOTE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	Apple Scab, Fire Blight	1.25	6.0	16	n/a	Make application between silver-tip and green-tip. Apply as a full-cover spray for early season disease suppression. Only one application is permitted. <b>NOTE:</b> Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches ½ inch.

TREE CROPS	(continued)					
CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Apple	Apple Scab	1.25	1.5	16	5	Extended spray schedule where fruit finish is not a concern: Continued application may be made at 5 to 7 day intervals between ½ inch green-tip and first cover spray. <b>NOTE:</b> Moderate to severe crop injury may result from
	Fire Blight	1-1.25	1.5	16	5	this extended spray schedule. It is not intended for fresh market apples or fresh apples where fruit finish is a concern as it is likely to cause fruit russetting. The addition of 1 to 3 pounds of hydrated lime per pound of KENTAN DF may reduce crop injury.
	Bitter Rot, Black Spot, Blotch, Powdery mildew	0.65-2.0	1.5	16	5	Begin applications at petal fall and repeat through fourth cover spray. The addition of 3 to 5 lbs hydrated lime per 100 gallons may reduce crop injury.
	Brooks spot	1.3	1.5	16	5	Apply 1.3 lbs KENTAN DF plus 2 lbs hydrated lime per 100 gallons. Make applications during late cover sprays.
	Bullseye rot*	5.0	8.0	16	365	Use 5.0 lbs KENTAN DF plus sprayable oil per 100 gallons water. Make applications after harvest.
	Collar Rot, Crown Rot	1.25	1.5	16	5	Mix in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for best results. Do not apply to foliage or fruit. NOTE: Do not use if soil pH is below 5.5 since copper toxicity may result.
	Sooty blotch	1.65	1.5	16	5	Use 1.65 lbs KENTAN DF plus 2½ lbs hydrated lime per 100 gallons. Apply during late cover sprays. When conditions indicate the potential for increased copper injury, add additional lime.
Avocado	Anthracnose, Blotch, Scab	6-7.87	3.15	18.9	14	Apply when bloom buds begin to swell and continue application at monthly intervals for five to six applications. Use the higher rates when conditions favor disease development.
Banana	Sigatoka (Black and Yellow)	2	1.05	18.9	7	Apply by air in 3 gallons of water. If needed, agricultural-type spray oil may be added. Apply on a 14 day schedule throughout the wet season. Apply at 21 day intervals during dry periods.
	Black Pitting	2.62	1.05	18.9	7	Mix in 100 gallons of water. Apply to the fruit stem and the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.

TREE CROPS	(continued)					
CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Cacao	Black Pod	2-5.62	2.25	15.75	14	Begin applications at the start of the rainy season and continue while infection conditions persist. Apply 2 to 5.62 pounds at 14 to 21 day intervals depending on disease severity. For drier areas, make two to four applications using 4.5 to 5.62 pounds per acre according to disease incidence and planting density.
Coffee	Coffee Berry Disease (Colletotrichum coffeanum)	4-5.25	2.1	12.6	14	Apply first spray after flowering and before onset of long rains and then at 21 to 28 day intervals until picking. Use the higher rates when conditions favor disease development.
	Bacterial Blight (Pseudomonas syringae)	4-5.25	2.1	12.6	14	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals. The critical time of spraying to control this disease is just before, during and after flowering(s) especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.
	Leaf Rust (Hemileia vastatrix)	2-4	2.1	12.6	14	Apply before the onset of rain and then at 14 day intervals while the rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.
	Iron Spot (Cercospora coffeicola), Pink Disease (Corticium salmonicolor)	2	2.1	12.6	14	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications.
Filbert	Bacterial Blight	10-15	6	24	14	Apply as a postharvest spray. In seasons of heavy rainfall apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Permitted only in Washington State and Oregon.
Filbert	Eastern Filbert Blight	15	6	24	14	Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 2 week intervals until early May. Thorough coverage is essential. If needed, agricultural-type spray oil may be added.
Mango*	Anthracnose	6.5	3.2	48	7	Apply 7 days after fruit set until harvest.
Olive	Anthracose, Olive Knot, Olive Leaf Spot, Peacock Spot	6-8	6.0	18	30	Make first application before winter rains begin. A second application in early spring should be made if disease is severe. Apply the higher rates for heavy disease pressure or when conditions favor disease development.

CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Peach, Nectarine	Bacterial Blast (Pseudomonas), Bacterial Canker, Bacterial Spot, (Xanthomonas), Coryneum Blight (Shot Hole), Leaf Curl	6-16	8	18	7	Make first application before fall rains and a second at late dormant. For peach leaf curl, late dormant application must be made before leaf buds swell. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.
Peach, Nectarine	Blossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	3.75	1.5	18	5	Full cover spray at pink bud.
	Bacterial Spot	1	1.5	18	5	Post-bloom application applied at first and second cover sprays. <b>NOTE:</b> Do not spray 3 weeks prior to harvest. Use only directed rates. Spotting of leaves and defoliation may occur from use in cover sprays.
Pear	Fire Blight	1	1.5	16	5	Apply at 5 day intervals throughout the bloom period. <b>NOTE</b> : Russetting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet on any variety.
	Blossom Blast (Pseudomonas)	10-16	8	16	n/a	Apply before fall rains and again during dor- mancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease develop- ment. Only one application is permitted.
Pecan	Kernel Rot, Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	2-4	2.1	8.4	14	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 week intervals starting at kernel growth and continue until shucks open. Use the higher rates and shorter spray intervals if frequent rainfall occurs.
Persimmon*	Cercospera Leaf Spot	1.25	1.0	6	14	Begin applications during leaf flush. Repeat at 14 day intervals throughout the season depending on disease severity.
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botrytis Blight, Late Blight ( <i>Alternaria alternata</i> ), Septoria Leaf Blight	2-5.25	2.1	8.4	14	Make initial application at bud swell and repeat on a 14 to 28 day schedule. If disease conditions are severe, use the higher rates and shorter spray intervals.
Quince*	Fire Blight, Blossom Blast	1	1.5	16	5	Apply at 5 day intervals throughout the bloom period. Apply in adequate water for thorough coverage.

CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu²+/A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Walnut	Walnut Blight	6-8	4.0	32	7	Apply first spray at early prebloom prior to o when catkins are partially expanded. Make additional applications during bloom and early nutlet stage when frequent rainfall of extended periods of moisture occur. Thor ough coverage of catkins, leaves and nutlets is essential for effective control. NOTE: Ad equate control may not be obtained wher copper tolerant species of Xanthomonas bacteria are present.

*	Exce	pt	Ca	lifoi	mia
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VEGETABLES						
CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Beans and lentils (Dry, Green)	Anthracnose, Bacterial Blight, Brown Spot, Common Blight, Cercospera Leaf Spot*, Downy Mildew, Halo Blight	1-1.97	0.79	4.74	7	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule depending on environmental conditions. Use the higher rates for more severe disease pressure.
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot, Downy Mildew	2-3.27	1.31	7.86	10	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals. Use the higher rates when con- ditions favor disease development.
Carrot	Alternaria Leaf Spot, Cercospora Leaf Spot, Downy Mildew	2	1	5	7	Begin applications when disease first threat- ens and repeat at 7 to 14 day intervals de- pending on disease severity.
Celery, Celeriac*	Bacterial Blight, Cercospora Early Blight, Downy Mildew, Septoria Late Blight	2	1	5.3	7	Begin applications as soon as plants are first established in the field, repeating at 7 day intervals depending on disease severity and environmental conditions.
Crucifers (Broccoli, Brussels Sprout, Cabbage, Cauliflower, Collard Greens, Mustard Greens, Turnip Greens)	Black Leaf Spot (Alternaria), Black Rot (Xanthomonas), Downy Mildew	1-1.32	0.53	2.65	7	Apply at 7 to 10 day intervals. Begin application after transplants are set in the field or shortly after emergence of field seeded crops or when conditions favor disease development. Use the higher rates when conditions favor disease development for disease development. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.

VEGETABLES (d					MINIMUM	
CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	RETREATMENT INTERVAL (DAYS)	COMMENTS
Cucurbits (Cantaloupe, Cucumber, Honeydew, Pumpkin, Squash, Muskmelon, Watermelon)	Alternaria Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (Suppression)	1-2.62	1.05	5.25	5	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat sprays at 5 to 7 day intervals. Use the higher rates when conditions favor disease development. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	1.97	0.79	7.9	7	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals depending on disease severity.
Okra	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spots, Powdery Mildew	0.5-1.5	1.05	5.25	5	Begin applications when conditions are favorable for disease development or disease is nearby. Repeat applications on a 5 to 10 day interval as needed depending on disease severity. Use higher rates and shorter spray intervals when conditions favor disease.
Onion,	Bacterial Blight,	1.5	1	6	7	Begin when plants are 4 to 6 inches high and
Garlic, Leek	Downy Mildew, Purple Blotch	2	1	6	7	repeat at 7 to 10 day intervals depending or disease severity. Can cause phytotoxicity to leaves.
Lettuce (Head and Leaf), Endive, and Escarole	Anthracnose, Downy Mildew, Leaf Spot	1.2-2.5	1.0	8.0	5	Begin treatment at the first sign of disease. Repeat on a 5 to 10 day interval to suppress disease. Slight injury may occur under ad- verse conditions.
Pea	Powdery Mildew	1-1.97	0.79	3.95	7	Begin applications when disease symptoms first appear and repeat at weekly intervals. Use the higher rates when conditions favor disease development.
Pepper	Alternaria, Anthracnose, Bacterial Spot, Cercospora Leaf Spot, Downy Mildew, Early and Late Blight, Phytophthora Blight*	1.97	0.79	11.85	3	Begin applications when conditions first favor disease development and repeat at 3 to 10 day intervals depending on disease severity.
Spinach	Anthracnose, Blue Mold, Cercospora Leaf Spot, Downy Mildew, White Rust	1.97	0.79	3.95	7	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals. <b>NOTE</b> : Flecking may occur on spinach leaves.
Tomato Processing	Anthracnose, Bacterial Canker, Bacterial Speck,	1.32	0.53	17.4	3	Begin application when disease first threatens and repeat at 3 to 10 day intervals depending on disease severity.
Fresh market	Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	1.32	1.6	8.0	3	

CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Watercress*	Cercospora Leaf Spot	1.32	0.53	2.12		Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals depending on disease severity. Do not exceed four applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray solution per acre.

CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	2-4	3	20	3	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease development. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara and Rosette. Either test for sensitivity or add 1 to 3 pounds of hydrated lime per pound of KENTAN DF
Hops	Downy Mildew	1.32	0.53	2.65	10	Make crown treatment after pruning, but be- fore training. After training, additional treat- ments are needed at about 10 day intervals. NOTE: Discontinue use 2 weeks before harvest.
Kiwi	Erwinia herbicola, Pseudomonas fluorescens, Pseudomonas syringae	4-5.25	2.1	6.3	30	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.

MISCELLANE	MISCELLANEOUS CROPS							
CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu²+/A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS		
Atemoya	Anthracnose	3-4	3.15	12.6	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.		
Carambola*	Anthracnose	5.25	2.1	10.5	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.		
Chives*	Downy Mildew	1.32	0.53	2.65	7	Begin applications when plants are established in the field. Repeat applications every 7 to 10 days depending on disease conditions.		

MISCELLANE	OUS CROPS (continued)		1			1
CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Dill*	Phoma Leaf Spot, Rhizoctonia Foliage Blight	1.97	0.79	3.95	7	Begin applications when plants are first established in the field and repeat at 7 to 10 day intervals depending upon disease severity and environmental conditions.
Douglas Fir	Rhabdocline Needlecast	2-3	2	20	7	Begin applications at bud break and repeat at 7 day intervals. Use the higher rates for severe disease.
Ginseng	Alternaria Leaf Blight, Stem Blight	2-2.62	1.05	5.25	7	Use as a tank mix with 2 pounds Rovral® 50W in 100 gallons of water. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. Begin KENTAN DF-Rovral applications as soon as plants have emerged in spring. Application should be repeated every 7 days until plants become dormant in fall. Apply fungicides at least 8 hours before rain. Use of a spreadersticker or sticker is advised. NOTE: Alternaria Leaf and Stem Blight is most severe in humid conditions such as those found in the dense canopies of 2 to 4 year old Ginseng. It is very important that the stems be thoroughly covered with fungicide; therefore, use a spray apparatus which distributes the fungicide throughout the canopy.
Guava	Anthracnose, Red Algae	3	1.23	4.92	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
Live Oak, Pecan	Ball Moss	3-5.25	2.1	8.4	365	Apply in 100 gallons of water in the spring when ball moss is actively growing using 1.5 gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. A second application may be required after 12 months. NOTE: Kentan may be injurious to ornamentals grown under Live Oaks or Pecans. This product may be reactive on metal and masonry surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
Litchi*	Anthracnose	3	1.23	4.92	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
Macadamia	Anthracnose	3-5.9	2.36	9.44	7	Initiate sprays at first sign of flowering and re- peat on weekly schedule until just before har- vest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease pressure.

CROP	DISEASE	APP. RATE (LBS PRODUCT/A)	MAX. APP. RATE (LBS Cu <sup>2+</sup> /A)	MAX. ANNUAL RATE (LBS Cu <sup>2+</sup> /A)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Macadamia	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	4-5.9	2.36	9.44	7	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rate when conditions favor disease development
Mamey Sapote*	Algal Leaf Spot, Anthracnose	4-5.25	2.1	8.4	14	Apply when conditions favor disease devel opment. Repeat on 14 to 30 day schedule a disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease development.
Papaya*	Anthracnose	3-6.57	2.63	21.2	7	Apply before disease appears. Apply at 7 to 14 day intervals. The addition of an approve spreader is desirable. Use the higher rate when conditions favor disease development
Parsley*	Bacterial Blight (Pseudomonas sp.)	2.5	1	2	10	Begin applications when plants are first es tablished in the field and repeat at 10 day in tervals as needed depending on disease severity and environmental conditions.
Passion Fruit*	Anthracnose	4-5.9	2.36	9.44	7	Make initial application just before flowerin and repeat on a weekly schedule until jus before harvest. Apply in sufficient water for thorough coverage. Use the higher rate when conditions favor disease developmen
Sugar Apple* ( <i>Annona</i> )	Anthracnose	7.87	3.15	12.6	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
Sycamore	Anthracnose	2-3	2	20	7	Apply as a full cover spray in 100 gallons of water or sufficient volume for thorough coverage. Make first application at bud crack an second application 7 to 10 days later at 10°, leaf expansion. Use the higher rates whe conditions favor disease development.

SEED DRESSI	NGS*			
CROP	DISEASE	APP. RATE (OUNCES PRODUCT)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Rice	Water Mold (Achlya spp.), Seed Rot (Pythium spp.)	2-4	No retreatment	Use the recommended rate per 100 lbs of seed. For handling efficiency and when using a seed treatment machine, dilute with an equal amount of water. Maintain continuous agitation of the mixture throughout the operation. For specific recommendations for your area, consult your local state extension specialist.
Wheat, Barley	Bacterial Leaf Blight (Pseudomonas syringae), Bacterial Leaf Streak (Xanthomonas translucens), Common Bunt (Tilletia caries)	2	No retreatment	Use the recommended rate per 100 lbs of seed. For handling efficiency and when using a seed treatment machine, dilute with an equal amount of water. Maintain continuous agitation of the mixture throughout the operation. For specific recommendations for your area, consult your local state extension specialist.
* Except Califor	nia	•	•	

#### GREENHOUSE AND SHADEHOUSE CROPS

Notice to User: KENTAN DF may be used in greenhouses and shadehouses to control disease on crops which appear on this label and specific instructions have been developed for the crops listed. The grower should bear in mind that the sensitivity of crops grown in greenhouses and shadehouses differs greatly from crops grown under field conditions. Neither the manufacturer nor seller has determined whether or not KENTAN DF can be used safely on all greenhouse and shadehouse grown crops. The user should determine if KENTAN DF can be used safely prior to commercial use. In a small area, apply the directed rates to the plants in question, i.e., foliage, fruit, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

Apply KENTAN DF according to specific rates given for those crops in pounds per acre. One and a half (1.5) level tablespoons of KENTAN DF per 1000 square feet is equivalent to 2 LBS. PER ACRE. KENTAN DF should be applied in adequate water for thorough coverage of plant parts. Begin application at first sign of disease and repeat at 7 to 14 day intervals; use shorter spray intervals during periods when severe disease conditions persist.

CROP	DISEASE	APP. RATE (TBSP Product/ 1000 SQ. FT.)	MAX. APP. RATE (TBSP Product/ 1000 SQ. FT.)	MAX. ANNUAL RATE (TBSP Product/ 1000 SQ. FT.)	MINIMUM RETREATMENT INTERVAL (DAYS)	COMMENTS
Citrus (Non-Bearing Nursery)	Brown Rot, Citrus Canker, Greasy Spot, Melanose, Pink Pitting, Scab	3	3	23.75	7	Begin applications when conditions favor disease development. Repeat sprays at 30 day intervals depending on disease severity.
Cucumber	Angular Leaf Spot, Downy Mildew	1 – 2	2	10	5	Apply weekly when plants begin to vine. Use the higher rates when conditions favor disease.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	1.5	1.5	15	7	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals depending on disease severity.
Pepper	Bacterial Spot	1.5	1.5	22.5	3	Begin applications when conditions first favor disease development and repeat at 3 to 10 day intervals depending on disease severity.
Tomato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	1	1	32.5	3	Begin applications when disease first threatens and repeat at 3 to 10 day intervals depending on disease severity.

#### CONIFERS

For use on conifers, including Douglas Fir, Fir\*, Juniper, Leyland Cypress\*, Pine\* and Spruce\*, in Christmas tree plantings, forest stands and silviculture nurseries. For control of foliar diseases, apply KENTAN DF as a thorough cover spray at rates ranging from 3 to 5 pounds per acre. Begin applications in the spring at the initiation of new growth and repeat at 2 to 4 week intervals. Use the higher rates when disease pressure is severe or when environmental conditions favor disease development. There is a maximum single application rate of 2 pounds of Cu²+/A with a maximum annual rate is 20 pounds of Cu²+/A with a minimum retreatment interval of 7 days.

KENTAN DF is recommended for use on the listed conifers for control of the following diseases:

CROP	LATIN NAME	DISEASE
Douglas Fir	Pseudotsuga menziesii	Rhabdocline Needlecast
Fir*	Abies spp.	Needlecasts
Juniper	Juniperus spp.	Anthracnose, Phomopsis Twig Dieback*
Leyland Cypress*	X Cupressocyparis leylandii	Cercospora Needle Blight
Pine*	Pinus spp.	Needlecasts
Spruce*	Picea spp.	Needlecasts

Lichens\*: To control lichens on any of the conifers above, apply 12 to 20 pounds of KENTAN DF per acre as a dormant application before new growth emerges in the spring. The addition of a non-ionic surfactant (NIS) will improve control. A second application may be required after 12 months. NOTE: Do not buffer or combine with emulsifiable concentrate insecticides

\* Except California

#### ORNAMENTALS

Use KENTAN DF for control of bacterial and fungal diseases of foliage, flowers and stems on ornamentals in greenhouses, shadehouses, outdoor nurseries, and outdoor landscape plantings. For ornamental crops in dormancy, apply as a thorough cover spray at rates ranging from 1.5 to 5 pounds per acre of KENTAN DF. One and a half (1 ½) level tablespoons of KENTAN DF per 1000 square feet is equivalent to 2 pounds per acre. Begin application at first sign of disease and repeat at 7 to 14 day intervals; use the higher rates and shorter spray intervals during periods of frequent rains or when severe disease conditions persist.

Unless otherwise noted, the maximum single application rate is 2 pounds of Cu<sup>2+</sup> per acre and the maximum annual rate is 20 pounds of Cu<sup>2+</sup> per acre. The minimum retreatment interval is 7 days.

KENTAN DF may be used alone or in combination with other fungicides registered for use on ornamentals as a maintenance spray. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Notice to User: Plant sensitivities to KENTAN DF have been found to be acceptable for the specific genera and species listed on this label under the conditions tested. However, phytotoxicity may occur. Due to the large number of species and varieties of ornamental and nursery plants and the wide range of growing conditions, it is impossible to test every one for sensitivity to KENTAN DF. Neither the manufacturer nor the seller has determined whether or not KENTAN DF can be safely used on ornamental or nursery plants not listed on this label. The user should determine if KENTAN DF can be used safely prior to commercial use. In a small area, apply the directed rates to the plants in question, (bedding plants, foliage, etc.), and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use. NOTE: This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.

CROP	SCIENTIFIC NAME	DISEASE
Aglaonema*	Aglaonema spp.	Bacterial Leaf Spot
Althea (Rose of Sharon)	Hibiscus syriacus	Bacterial Leaf Spot
Andromeda, Japanese*	Pieris japonica	Leaf Spots, Twig Blight
Aralia	Dizygotheca elegantissima	Alternaria, Cercospora Leaf Spot, Xanthomonas Leaf Spot
Arborvitae	Thuja spp.	Alternaria Twig Blight, Cercospora Leaf Blight
Aster*	Aster spp.	Downy Mildew, Leaf Spots
Azalea 1/	Rhododendron spp.	Botrytis Blight, Bud Blight*, Cercospora Leaf Spot, Phytophthora Dieback, Powdery Mildew, Twig Blight*
Beech*	Fagus spp.	Leaf Spots
Begonia	Begonia semperflorens	Bacterial Leaf Spot (Erwinia spp., Pseudomonas spp., Xanthomonas spp.)
Bougainvillea	Bougainvillea spectabilis	Anthracnose, Bacterial Leaf Spot
Boxwood*	Buxus spp.	Leaf Spots
Camellia	Camellia japonica, C. sasanqua	Anthracnose, Bacterial Leaf Spot
Camphor Tree	Cinnamomum camphora	Pseudomonas Leaf Spot
Canna	Canna spp.	Pseudomonas Leaf Spot
Carnation 1/	Dianthus spp.	Alternaria Blight, Botrytis Blight, Pseudomonas Leaf Spot
Cedar*	Cedrus spp.	Tip Blight
Cherry, Nanking*	Prumas tomentosa	Bacterial Leaf Spot
Chinese Tallow Tree	Sapium sebiferum	Bacterial Leaf Spot (Pseudomonas spp., Xanthomonas spp.)
Chrysanthemum 1/	Chrysanthemum morifolium	Botrytis Blight, Pseudomonas Leaf Spot, Septoria Leaf Spot
Cotoneaster	Cotoneaster spp.	Botrytis Blight

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ORNAMENTALS (continued)				
CROP	SCIENTIFIC NAME	DISEASE		
Loquat	Eriobotrya japonica	Colletotrichum spp., Entomosporium maculata		
Magnolia (Southern)	Magnolia grandiflora	Algal Leaf Spot, Anthracnose, Bacterial Leaf Spot		
Magnolia (Sweet Bay)	Magnolia virginiana	Anthracnose		
Magnolia (Oriental)	Magnolia soulangiana	Bacterial Leaf Spot		
Mandevilla	Mandevilla spp.	Anthracnose		
Maple*	Acer spp.	Pseudomonas Leaf Blight, Tar Leaf Spot		
Marigold	Tagetes spp.	Alternaria Leaf Spot, Botrytis Leaf Rot, Cercospora Leaf Spot, Flower Rot		
Mountain-Ash*	Sorbus spp.	Fire Blight		
Mulberry, Contorted*	Morus bombycis	Bacterial Leaf Spot		
Mulberry, Weeping	Morus alba	Bacterial Leaf Spot		
Narcissus*	Narcissus spp.	Leaf Blight		
Nephthytis*	Syngonium podophyllum	Bacterial Leaf Spot		
Oak*	Quercus spp.	Leaf Spots		
Oak, Laurel	Quercus laurifolia	Algal Leaf Spot (Cephaleuros virescens)		
Oleander	Nerium oleander	Bacterial Leaf Spot, Fungal Leaf Spot		
Oregon Grapeholly*	Mahonia acquifolium	Leaf Spots		
Pachysandra	Pachysandra procumbens	Canker*, Leaf Spots, Twig Blight*, Volutella Leaf Blight		
Palm, Date	Phoenix canaries	Pestalotia Leaf Spot		
Palm, European Fan	Chamaerops humilis	Pestalotia Leaf Spot		
Palm, Parlor*	Chamaedorea elegans	Bacterial Leaf Spot		
Palm, Queen	Arecastrum romanzoffianum	Exosporium Leaf Spot, Phytophthora Bud Rot		
Palm, Washingtonia	Washingtonia robusta	Pestalotia Leaf Spot		
Peach (Flowering) 3/*	Prunus spp.	Bacterial Blast, Brown Rot, Fire Blight		
Pear (Flowering)	Pyrus calleryana	Fire Blight, Leaf Spot		
Pentas (Egyptian Star)	Pentas spp.	Bacterial Leaf Spot (Pseudomonas spp.*, Xanthomonas spp.)		
Peony	Paeonia spp.	Botrytis Blight		
Periwinkle	Catharanthus roseus, Vinca spp.	Phomopsis Stem Blight		
Philodendron	Philodendron selloum	Bacterial Leaf Spot		
Phlox	Phlox spp.	Alternaria Leaf Spot		
Photinia (Red Tip)	Photinia x fraseri, P. glabra	Anthracnose, Entomosporium Leaf Spot		
Pine*	Pinus spp.	Needlecasts		
Pistachio	Pistacia chinensis	Anthracnose		
Plantain Lily 6/	Hosta spp.	Bacterial Leaf Spot		
Plum (Flowering) 3/*	Prunus spp.	Bacterial Blast, Bacterial Leaf Spot, Brown Rot, Fire Blight		
Pothos*	Scindapsus spp.	Bacterial Leaf Spot		
Powder Puff Plant	Calliandra spp.	Bacterial Leaf Spot		
Pyracantha	Pyracantha spp.	Fire Blight, Scab		
Rhododendron	Rhododendron spp.	Alternaria Flower Spot		
Rose 1/	Rosa spp.	Black Spot, Powdery Mildew		

ORNAMENTALS (continued)			
CROP	SCIENTIFIC NAME	DISEASE	
Snapdragon	Antirrhinum majus	Anthracnose, Dieback, Downy Mildew	
Spathe Flower*	Spathiphyllum spp.	Bacterial Leaf Spot	
Spirea*	Spiraea spp.	Fire Blight	
Spruce*	Picea spp	Needlecasts	
Sycamore	Platanus spp.	Anthracnose, Leaf Spots*	
Tulip	Tulipa spp.	Anthracnose, Botrytis Blight	
Umbrella Tree*	Schefflera spp.	Bacterial Leaf Spot	
Verbena	Verbena spp.	Xanthomonas Leaf Spot	
Viburnum	Viburnum odoratissimum, V. suspensum, V. plicatum	Anthracnose	
Viola (Pansy, Violet)	Viola spp.	Downy Mildew	
Willow	Salix spp.	Anthracnose	
Yew*	Taxus spp.	Needle Blight	
Yucca (Adam's Needle)	Yucca spp.	Cercospora Leaf Spot, Septoria Leaf Spot	
Zinnia*	Zinnia spp.	Leaf Spots	

#### \*Except California

- 1/ Can cause discoloration of foliage and/or blooms on some varieties. To prevent residues on commercial plants, do not spray immediately before selling season.
- 2/ Apply KENTAN DF at 4.5 to 6.25 pounds per acre. The maximum single application rate is 2.5 pounds of Cu<sup>2+</sup> per acre. The maximum amount of metallic copper which may be applied in a 12 month period is 75 pounds of Cu<sup>2+</sup> per acre. Do not apply any additional copper pesticide to this land for 36 months. 3/ Apply dormant through bloom only.
- 4/ Hibiscus Do not apply to plants in flower.
- 5/ For Indian Hawthorne use 3 to 5 pounds per acre.
- 6/ Some cultivars may be sensitive to KENTAN DF.

NOTE: Phytotoxicity may depend on varietal differences. If unfamiliar with the use of KENTAN DF, apply the directed rate to a few plants and observe after 7 to 10 days for symptoms of phytotoxicity.

Control of Ball Moss\*, Spanish Moss\* and Lichens\* on Ornamentals and Shade Trees: Apply KENTAN DF in early spring when trees are dormant. Apply 9 to 12 pounds of KENTAN DF in 100 gallons of water, using 1 ½ gallons of spray per foot of tree height. Be sure to thoroughly wet ball moss tufts, Spanish moss or lichens. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.

NOTE: KENTAN DF may be injurious to some ornamental plants growing beneath the trees. This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.

Cold Storage Protection for Dormant Rootstock\*: To protect bare-root nursery trees from Phytophthora Crown Rot and Botrytis, use 4 to 6 pounds of KENTAN DF per 100 gallons of water. Apply as a dip or spray to the roots and lower stems of dormant rootstock prior to placing in cold storage. Do not apply to rootstock less than 2 years old.

\*Except California

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition (approximately 3 to 10 mph), and there are no sensitive areas within 250 feet downwind.

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of copper compounds. Where states have more stringent regulations, they must be observed.

#### Equipment

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

#### **Additional Requirements for Aerial Applications**

- The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- The release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
- When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

#### Additional Requirements for Ground Boom Application

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

#### Chemigation Requirements

- · Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- · A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### Requirements for Chemigation Systems Connected to Public Water Systems

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- · Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventor (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 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 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, or in cases where there is no water pump, 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.

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

#### Requirements for Sprinkler Chemigation

- 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 back flow.
- · 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.
- · Do not apply when wind speed favors drift beyond the area intended for treatment.

#### STORAGE AND DISPOSAL

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

Pesticide Storage: Store under well-vented, cool and dry storage conditions. Do not store under moist conditions.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Type: This is a nonrefillable, non-rigid container (bag). Do not reuse or refill this container.

Container Disposal: Empty the package completely. Then dispose of the empty container according to state and local regulations. Place in trash or offer for recycling if available or return it to the Seller, or, if allowed by state and local authorities, by burning. If burned stay out of smoke.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire label before using this product, including this Limitation of Warranty and Liability.

If the terms are not acceptable, return the product at once unopened for a refund of the purchase price.

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Directions for Use, subject to the inherent risks described below, when used in accordance with the Directions for Use under normal conditions.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ISAGRO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Buyers and Users of this product must be aware that there are inherent unintended risks associated to the use of this product, independent from the control of Isagro. These risks include, but are not limited to, weather conditions, soil factors, moisture conditions, diseases, irrigation practices, condition of the crop at the time of application, materials which are present in the tank mix with this product or prior to the application of it, cultural practices or the manner of use or application, all risks which are impossible to eliminate. The Buyers and Users should be aware that these factors may cause: ineffectiveness of the product, reduction of harvested yield of the crop (entirely or partially), crop injury or injury to non-target crops or plants or to rotational crops caused by carryover in the soil, resistance of the target diseases to this product. Therefore additional care, treatment and expense are required to take the crop to harvest.

If the Buyer does not agree with the acceptance of these risks, then THE PRODUCT SHOULD NOT BE APPLIED. To the extent consistent with applicable law, by applying this product the Buyer acknowledges and accepts these inherent unintended risks and AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

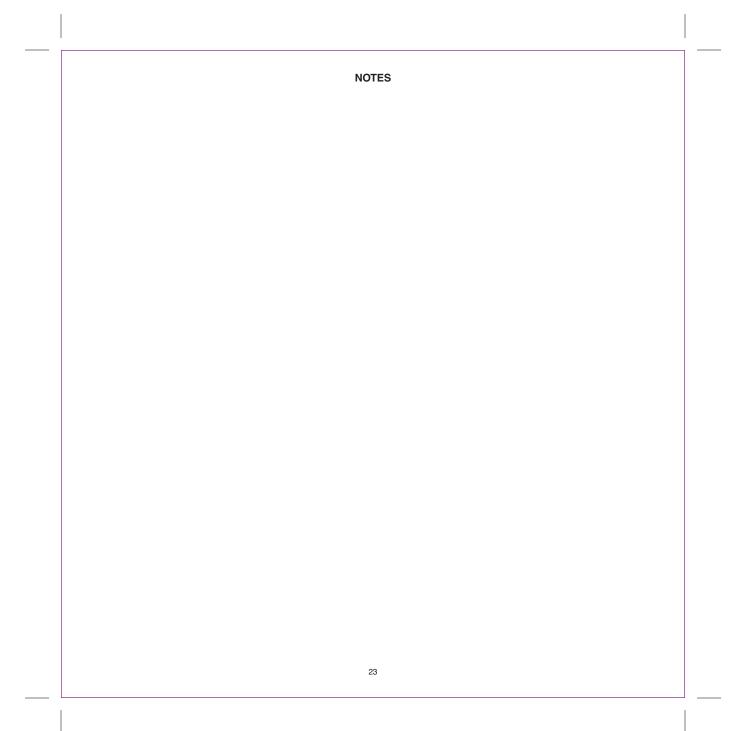
To the extent consistent with applicable law, in no event shall ISAGRO or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product (including claims based in contract, negligence, strict liability, other tort or otherwise). To the extent consistent with applicable law, the exclusive remedy of the User or Buyer and the exclusive Liability of Isagro or Seller shall be the return of the purchase price of the product, or at the election of Isagro or Seller, the replacement of the product.

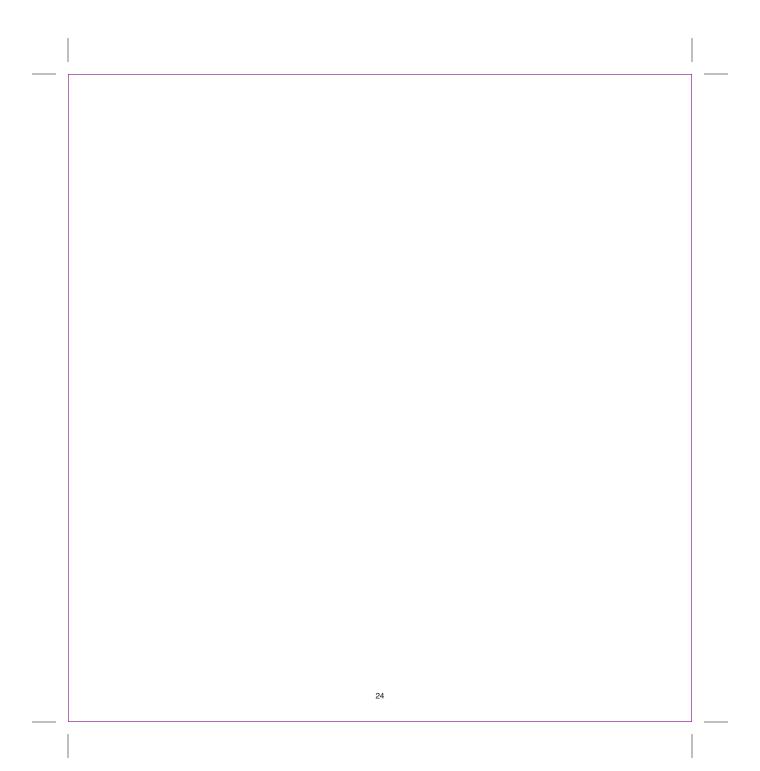
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Isagro or its Seller must have prompt notice (within 7 days of observation) of any claim so that an immediate inspection of Buyer's or User's growing crops can be made. To the extent consistent with applicable law, if Buyer and User do not notify Isagro or Seller of any claims, in proper time, it shall be barred from obtaining any remedy. To the extent consistent with applicable law, by applying this product the Buyers and Users are deemed to have accepted the terms of this Limitation of Warranty and Liability, which may not be modified by any verbal or written agreement.

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(01-R0411) CLL/BHC Notification 20140922/20141016 Notif 05Oct2016





# Kentan<sup>®</sup> DF

## **DRY FLOWABLE** FUNGICIDE/BACTERICIDE FOR AGRICULTURAL USE

#### **ACTIVE INGREDIENT:** Copper Hydroxide (CAS No. 20427-59-2)\*..... OTHER INGREDIENTS: 38.7% TOTAL 100.0%

\*Metallic Copper (Cu2+) Equivalent is 40% by weight

## **KEEP OUT OF REACH OF CHILDREN DANGER / PELIGRO**

See Booklet for Precautionary Statements and Directions for Use

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label find someone to explain it to you in detail.)

FIRST AID		
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15 to 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.	
IF INHALED	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	
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.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate use of gastric layage.		

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate use of gas

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For Chemical Emergency Spill Leak Fire Exposure or Accident Call CHEMTREC Day or Night Domestic North America 800-424-9300; International 703-527-3887 (collect calls accepted)

EPA Registration No.: 80289-2

Manufacture by Isagro S.p.A. Centro Uffici San Siro Via Caldera 21 Milan, Italy

EPA Establishment No.: 79558-ITA-1

Manufactured for Isagro USA, Inc. 430 Davis Drive, Suite 240 Morrisville, NC 27560

**NET CONTENTS: 10 pounds** 

Made in Italy

