

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 MM St., S.W. Washington, D.C. 20460 EPA Reg. Number: Date of Issuance:

19713-

MAR 1 2 1993

Term of Issuance:

Conditional

Name of Pesticide Product:

Drexel KOP-50% W.P.

NOTICE OF PESTICIDE:

x Registration Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Drexel Chemical Company P.O. Box 9306 Memphis, TN 38109

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/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.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
- 2. Make the following label changes listed below before you release the product for shipment:
 - a. Add the phrase, "EPA Reg. No. 19713-321".
 - b. In the environmental hazards section, update the statements to include the following:

Signature	of	Approving	Off	ici	a۱	:
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Date

MAR 1 2 1993

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EPA Form 8570-6

page 2 EPA Reg. No. 19713-321

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 washwaters.

c. According to PR Notice 82-2, the Tank Mix directions must include statements similar to the following:

This product can be mixed with _______ (chemical name, including percentage of active ingredient and type of formulation, or specific product name, or both) for use on ______ (Crops/sites) in accordance with the more (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.

- d. Modify the mancozeb and maneb tank mix directions so they are in compliance with the EBDC PD-4 published in the Federal Register on March 2, 1992.
- e. Delete the general reference to tar mixing this product with insecticides. Specific directions for tank mixing must include the product name and the sites or crops for which the tank mix claims are made. See comment c. above.
- f. Specify after stickers, spreaders, spray and crop oil: "(cleared for application to growing crops)".
- g. For Filberts specify a rate/A of 4-6 lbs. The 16-24 lbs rate is for seasons of heavy rainfall.
- 3. Submit one (1) copy of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

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

A stamped copy of the label is enclosed for your records.

Cynthia Giles-Parker Product Manager (22) Fungicide-Herbicide Branch Registration Division (H7505C) ACCEPTED
with COMMENTS
In EPA Letter Dated:

MAR 1 2 1993

12/28/92

Under the Federal Insecticide françoide, and Rodenticide Act as schended, for the pesticide regimented under EPA Reg. No. 197/3 - 3.2/

DREXEL

KOP-50% W.P.

Agricultural fungicide - Bactericide

*(Metallic Copper Equivalent 50%)

DANGER - PELIGRO



KEEP OUT OF REACH OF CHILDREN

For additional information, see State nt of Practical Treatment

PRECAUCION AL USUARIO:

Si usted no lee ingles, no use este producto haste que la etiquete haya sido explicado ampliamente.

PRECAUTIONARY STATEMENTS HAZARDS TO HUY'NS AND DOMESTIC ANIMALS

DANGER. Corrosive. Causes irreversible eye damage. Do not get in eyes. Wear goggles, face shield or safety glasses. Causes skin irritation. Harmful if swallowed, absorbed through the skin, or inhaled. May cause skin sensitization reactions in certain individuals. Avoid contact with the skin, eres, or clothing. Avoid breathing dust. Protective clothing should be worn. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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Tachet 827

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with water

for 15 minutes. Get medical attention.

IF CN SKIN: Wash with plenty of soap and water.

Get medical attention.

IF SWALLOWED: Drink promptly a large quantity of

milk, egg white, gelatin solution, or if these are not available, large quantities of water. Avoid alcohol.

IF INHALED: Remove victim to fresh air. If not

breathing, give artificial respiration, preferably mouth-to-mouth. Get medical

attention.

NOTE TO PHYSICIAN: Probable nucosal damage may

contraindicate use of gastric lavage.

ENVIRONMENTAL HAZARDS

This resticide is toxic to fish and aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not allow rinsate from cleaning of equipment or disposed material to enter surface or ground water.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

RE-ENTRY STATEMENT

Do not enter treated areas without protective clothin until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. (Indicate specific oral warning which inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure). oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that writter warnings cannot be understood by workers. Written warnings must include the following information: DANGER. Area treated with KOP-50% W.P. on (date of application). Do not enter without appropriate protective clothing until spray has dried. In case of accidental exposure see Statement of Practical Treatment.

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GENERAL INFORMATION

Use KOP-50% W.P. according to use directions below. KOP-50% W.P. is adaptable to spraying from aircraft and ground spraying equipment. Depending upon equipment used and the specific crop, the volume applied per acre will differ. Refer to the general recommendation volume cable below.

Minimum Recommended Spray Volume (Gallons) per acre when applying KOP-50% W.P.

	AERIAL	GRO	DUND
		DILUTE	CONCENTRATE
Vegetables	3	20	-
Field Crops	3	20	_
Vines	5	150	50
Tree	10	400	50
Citrus	10	800	100
			(50 Florida)

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GENERAL CHP) IGATION INSTRUCTIONS

Apply this product only chrough one or more of the following types of systems: sprinkl? including center pivot, lateral move, end tow, side (whee roll, traveler, big gun, solid set, or hand move irrigation system(s). Do not apply this product through any other. Se of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from gonuniform distribution of treated eater.

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 dex.ces 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.

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

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Posting must conform to the following regoirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the freated areas and in any location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain place indefinitely as long as they are composed of materials to prevent deterioration and maintain legicality for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall; and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KERP OUT, followed by an octagonal stop sign symbol at least 8 inches in drameter containing the word STOP. Below the symbol shall be the words PRSTICIDES IN IRRIGATION WATER.

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CHENIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public mater system means a system for the provision to the public piped mater for human consumption if such system has at lest 15 service connections or regularly serves an average of at least 25 individuals daily at least 80 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backlion 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 juto the reservair 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.

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

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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 provent fluid from Jeing withdrawn from the supply tank when the irrigation system is either automatically or manually shut down

When mixing, fill nurse tank half full with water. Add

KOP-50% W.P. slowly to tank while hydraulic or mechanical

agitation is operating and continue filling with water.

Stickers, spreaders, insecticides, nutrients, etc. should be

added last. If compatibility is in question, use the

compatibility jar test before mixing a whole tank. Because

of the wide variety of possible combinations which can be

encountered, observe all cautions and limitations on the

label of all products used in mixture

KOP-50% W.P. should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems.

Agitation is recommended.

SPRINKLER CHEMIGATION

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

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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.

The system must contain a functional chack 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 pipeli, e 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 shot down.

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The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the gater 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 the pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., disphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being lifted with a system interlock

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KOP-502 M P ... should be added through a traveling irrigating system continuously or at the last 30 minutes of solid sed or hand moved irrigation systems.

Agitation is recommended.

CROP CLASSIFICATION

CITRUS:

Grapefruit, Lemon, Lime, Orange,

Tangelo, and Tangerine.

FIELD CROPS:

Alfalfa, Barley, Cantaloupes, Honeydew, Muskmelon, Peanut, Potato, Strawberry, Sugar Beet, Watermelon, and Wheat.

TREE CROPS:

Almond, Apple, Apricot, Avocado, Banana, Cacao, Cherry, Coffee, Filberts, Live Oak,

Mango, Nectarine, Olive, Peach, Pear, Plum, Prune, Sycamore, and Walnut.

VEGETABLES:

Beans, Broccoli, Brussels Sprout, Cabbage, Carrot, Cauliflower, Celery, Cucumber, Eggplant, Onion, Peas, Peppers, Pumpkin,

Squash and Tomato.

VINES:

Blackberry, Cranberry, Currants, Gooseberry,

Grape, and Hops.

KOP-50% W.P. may be applied as an aerial, ground dilute or ground concentrate spray unless specifically directed otherwise by crop.

When selecting a use rate for KOP-50% W.P. do not apply less than the label recommended minimum amount. Under heavy disease pressure or when conditions favor such, use the higher rate and shorter spray intervals specified for each crop. In addition, use the higher rate for larger mature tree crops.

The per acre use rate of KOP-50% W.P. is applicable for both dilute and concentrate spraying. Consult the KOP-50% W.P. label for specific rates and timing of application by crop.

Complete spray coverage is essential to assure optimum performance from KOP-50% W.P. When treating on a concentrate basis or by aerial application, unless you have had specific previous experience, it is advisable to test for compatibility and crop tolerance prior to full scale commercial utilization.

While volume is important in obtaining full spray coverage, often factors such as foliage density, environmental conditions and sprayer calibrations, 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 spray tank one-half full with water. Add KOP-50% W.P. slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Spreaders, stickers, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the compatibility jar test before mixing a whole tank.

NOTE: KOP-50% W.P. should not be applied in a spray solution having a pH less than 6.5 or greater than 9.0 as phytotoxicity may occur.

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 KOP-50% W.P. resulting in possible phytotoxicity or loss of effectiveness.

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

APPLICATION FOR FROST INJURY PROTECTION

BACTERIAL ICE NUCLEATION INHIBITOR

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Application of KOP-50% W.P. made to all crops listed on this label at rates and stages of growth indicated on this 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.

•	CITRUS	3
Disease	Rate/Acre	Use Instructions
Melanose, Scab, Pink Pitting	4-12 lbs	Apply as pre-bloom and post-bloom sprays.
Greasy Spot	2-6 lbs	Use higher rates when conditions favor disease
Brown Rot (California Only)	4-8 lbs	Begin application on fall and continue as needed. Apply to skirts of trees to a height of at least 4 feet. Apply also to bare ground one foot beyond skirt. Use higher rates when conditions favor disease. NOTE: In California, in areas subject to copper injury, add 1/3 to 1 pound of high quality lime per pound of KOP-50% W.P.
Phytophthora	l lb	Mix with 1 gallon of water and 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 for protection for up to one year, but does not cure existing infections.



FIELD CROPS

Стор	Disease	Rate/A	Use Instructions
Alfalfa	Cercospora & Leptosphaerulina Leaf Spots	Z lbs	Apply 10-14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
Cantaloupes, Honeydews, Muskmelons	Downy Mildew	2 lbs	Begin application when conditions are favorable for disease development and repeat at 5-7 day intervals as needed depending on disease severity.
Peanut	Cercospora Leaf Spot	1.5-3 lbs	Begin spraying at 35-40 days after planting or when disease symptoms first appear and repeat at 10-14 day intervals as needed. Reduce sprays to 7 day intervals during humid weather. Use higher rates when weather conditions favor dr.ft. KOP-50% W.P. may be blended by dealers and should be applied at rates equivalent to the above. KOP-50% W.P. may be blended with talc and/or sulfur to make a 3 to 10% dust.



Crop	Disease	Rate/A	Use Instructions
Potatoes	Early & Late Blight	I-1.5 lbs	Apply at 7-10 dav intervals starting when plants are 6 inches high until 2 weeks before harvest in locations where disease is light and up to 3-4 lbs per/A where disease is more severe
3traw- berries	Leaf Spot & Leaf Blight	2-3 lbs	Begin application when plants are established and continue on a weekly schedule throughout season. NOTE: Discontinue application if signs of crop injury appear.
Sugar Beets	s Cercospora Leaf Spot	2-5 1bs	Begin application when conditions first favor disease devel- opment and repeat at 10-14 day intervals as needed. Use the higherte when disease is severe. Addition of Surf Ac 820 or a suitable agricul- tural spray oil is recommended.
Watermelon	Anthracnose	2 lbs	Apply as soon as plants become established in the

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field and repeat:.. at weekly inter-

at weekly inter-'
vals as needed.'.'.
depending upon
disease severity.

Crop	Disease	Rate/A	Use Instructions
Watermelon Cont'd.	Downy Hildew	1.5-3 lbs	Apply as soon as plants become established in the field and repeat at weekly intervals as needed depending upon disease severity. Use higher rates when conditions favor disease.
Wheat and Barley	Septoria Leaf Blotch & Helminthos- porium Spot Blotch	1.5-2 lbs	Make first application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease.

TREE CROPS				
Crop	Disease	Rate/A	Use Instructions	
Almonds	Coryneum Blight, Blossom Brown Rot	8-12 lbs	Dormant application: Apply before foliage buds begin to swell. Use higher rates when rainfall is heavy and disease pressure is high.	
		6-8 lbs	Early bloom (popcorn) application. Apply before full bloom. Use higher rates when rainfall is, heavy and disease pressure is high. NOTE: To avoid plant injury do	
	BEST AVAILABLE	COPY	not use above rate after full bloom.	

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Crop	Disease	Rate/A	Use Instructions	:
Cont'd.	Bacterial Blast (Pseudomonas)	12-16 lbs	Apply at dormant to early pink bud. For control in sprinkler irrigated orchards or where disease is severe, apply 1 pound/A at 2 week postbloom intervals or just before sprinkling. NOTE: Injury may occur from postbloom sprays, especially on Neplus varieties.	
Apple (Except California)	Anthracnose, European Canker, Pseudomonas	12-16 lbs	Apply before fall rains. Use higher rates under severe disease conditions. NOTE: Use on yellow varieties may cause discoloration. To avoid, pick before spraying.	- /
	Fireblight	8-16 lbs	Make application between silver-tip and green tip. Apply as a full cover spray. NOTE: Crop injury mry occur from late application; discontinue use wher green tip reaches 1/2 inch.	1
	Crown or Collar Rot BEST AVAILABLE	4 lbs	Mix in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree. Apply either in early spring or in late fall after harvest. NOTE: Do not use if soil pH is below 5.5 since copper toxicity may result	•

Crop	Disease	Rate/A	Use Instructions
Apricots	Coryneum Blight (Shot Hole), Blossom Brown Rot	8-12 lbs	Apply at poporn to full bloom, and use higher rates when conditions favor disease. NOTE: Applications applied after bloom will result in cropinjury.
Avocados	Scab	8-12 lbs	Apply when bloom buds begin to swell and continue application at monthly intervals for 5 to 6 applications. Use higher rate when conditions favor disease.
Bananas	Sigatoka	2 lbs	Apply by air in 3 gallons of water combining 0.5 gallons of a suitable agricultural spray oil. Apply on a 14-day schedule throughout the wet season. Apply at 21-day intervals during dry periods.
	Black Pitting	4 lbs	Mix in 100 gallons of water (4 pounds per acre) directly to the fruit stem and include the basal portio of the leaf crown. Apply during the first and second weeks after fruit emergence.



Crop	Disease	Rate/A	Use Instructions
acao	Black Pod	2-4.5 lbs	Begin applications at the start of the rainy season and continue while infection conditions persist. Sprays should be made as often as 14 to 21 days in high rainfall areas at varying rates depending on disease severity. For drier areas, where 2 to 4 applications are recommended during critical infection periods and at long intervels, use 8.5 pounds per acre, according to disease incidence and planting density
Cherry	Dead Bud (Pseudomonas syringae) and Coryneum Blight	8-12 1bs	Make first application in fall before heavy rains and a second at late dormant. In orchards where the disease is severe, a spray should also be applied shortly after harvest. Add l pint of superior- type oil per 100 gallons of water as a dilute spray
	Brown Rot, Blossom Blight	8-12 lbs	Apply a full cover spray at popcorn stage and a second. application at full bloom.



Crop	Disease	Rate/A	Use Instructions
Coffee	Coffee Berry Disease (Collectotrichum coffeanum)	6-8 1bs	Apply first spray after flowering and before onset of long rains and then at 21-28 day intervals until picking. Use higher rates when rainfall is heavy and disease pressure is high.
	Bacterial Blight (Pseudomonas syringae)	6-8 1bs	Begin spray program before the onset of the long rains 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 flower(s), especially when coirciding with wet weather. Use higher rates when rainfall is heavy and disease pressure is high.
	Lear Rust (Hemileia vastatrix)	2-4 lbs	Apply before the onset of rain and then at 21-day intervals while the rains continue. Use higher rates when rainfall is heavy and disease pressure is high.
	Iron Spot (Cercospora coffeicola) and Pink Disease (Corticium salmonicolor)	2 lbs	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications.

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Crop	Disease	Rate/A	Use Instructions
Filberts	Bacterial Blight	16-24 lbs A-0	Apply as a post- harvest spray. In seasons of heavy rainfall apply a second spray when three-fourths cf the leaves have dropped. Add l pint of superior-type oil per 100 gallons of water.
Mango (Florida)	Anthracnose	8 lbs	Apply monthly after fruit set until harvest.
Olives (California)	Peacock Spot	8-12 1bs	Make first application before winter rain fall. A second application in early spring should be made if disease is severe. Apply the high rate for heavy disease pressure or when conditions favor such.
Peacher, Nectarines	Leaf Curl, Coryneum Blight (Shothole)	8-16 lbs	Apply at leaf fall. Use the highest rate when rainfall is very heavy and disease pressure is high. May be used with agricultural spray oil.
	Brown Rot and Blossom Blight	8-12 lbs	Full cover spray at pink bud. Application at this time affords some control of Leaf Curl and Coryneum Blight.
	Bacterial Spot	1 lb	Post Bloom applied applied at first and second cover sprays.
BES	I AVAILABLE CODA	8 lbs	Apply as a dormant spray. NOTE: Do not spray three weeks prior to harvest. Use only recommended rates.

Crop	Disease	Rate/A	Use Instructions
Peaches, Nectarines Cont'd.		8 lbs Cont'd	Spotting of leaves and defoliation may occur from use in cover sprays.
Pears	Fire Blight	1 lb	Apply at 5 day intervals throughout the bloom period.
	Pseudomonas Blight	12-16 lbs	Apply before fall rains and again during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor development of such. NOTE: Excessive dosages may cause fruit russet.
Plums & Prunes	Coryneum Blight (Shothole)	8-16 lbs	Apply as a dormant spray. Use the higher rate when rainfall is heavy and/or disease pressure is high.
	Brown Rot and Blossom Blight	8-12 lbs	Apply full cover application at pink, red or early white stage. Use the higher rate when disease pressure is heavy or conditions favor the development of sucn.
Walnut	Walnut Blight	8-12.5 lbs	Apply first application spray at early pre-bloom prior to when catkins are partially expanded. Make additional application during bloom and early nutlet stage or as
	BEST AVAILABLE	-	needed if frequent rainfall occurs.

Crop	Disease	Rate/A	Use Instructions
Live Uak (Texas and Florida)	Ball Hoss	6 Ibs	Apply 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: KOP-50% W.P. may be injurious to ornamentals grown under Live Oaks.
Sycamore	Anthracnos	e 2-3 lbs	Apply as a full spray. Apply in 100 gallons of water or sufficient volume for thorough coverage. Hake first application at bud crack and second application 7-10 days later at 10% expansion.

VECETABLES			
Crop	Disease	Rate/A	Use Instructions
Beans	Bacterial Blight (Halo & Common)	1-3 lbs	Use the higher rate for more severe disease. For protective sprays, make first application when plants are six inches high; repeat on a 7-14 day schedule. depending upon local conditions.



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Стор	Disease	Rate/A	Use Instructions
Broccoli, Brussels Sprouts, Cabbage Cauliflower	Black Rot (Xanthomonas & Black Leaf Spot (Alternaria)	2 lbs	Apply at 7 to 10 day intervals. For control of disease of these crops, begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development.
	Downy Mildew (Cabbage Only)	0.5-1 lb	Use higher rates when conditions disease. NOTE: Reddening of older leaves may occur on Broccoli and a flecking of wrapper leaves may occur on Cabbage.
Carrots	Cercospora Leaf Spot	2 lbs	Begin application when disease first threatens and repeat at 7-14 day intervals as needed depending on disease severity.
Celery	Cercospora Early Blig Septoria Late Bligh & Bacteria Blight	ht, t,	Begin application as plants are first established in the field, repeating at 5-7 day intervals depending on disease severity and environmental conditions.
Cucumber	Angular Leaf Spot and Downy Mildew	1.5-2 1bs	Apply weekly when plants begin to vine.
Eggplant (Except California)	Alternaria Blight, Anthracnos & Phomopsi	e	Begin application prior to development of disease symptoms Repeat sprays at 7- 10 day intervals or as needed depending on disease severity.

Crop	Disease	Rate/A	Use Instructions
Union	Purple Blotch & Downy Mildew	Z Ibs	Begin when plants 4-6 inche: high and repeat at 7-10 day intervals as needed depending upon disease pressure.
Peas	Powdery Mildew	1.5-3 lbs	Begin application when disease symptoms first appear and repeat at weekly intervals as needed. Use higher rate for more severe disease.
Peppers	Bacterial Spot	2-3 lbs	Begin application when conditions first favor disease development and repeat at 5-10 day intervals as needed depending on disease severity. Use higher rates for severe disease.
Pumpkin & Squash	Powdery Mildew	1.5-3 lbs	Begin application when plants are three weeks old or when disease symptoms first appear and repeat at 7 day intervals as needed to maintain control. Use the higher rates if disease is heavy or conditions favor such.
Tomatoes	Early and Late Blight	2-3 1bs	Begin when disease first threatens and repeat at 7-10 day intervals or as needed depending on disease severity. Use higher rate for

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severe disease.

Crop	Disease	Rate/A	Use Instructions
Tomatoes Cont'd	Bacterial Speck	2 lbs	Begin applications when disease first threatens and repeat at 10-30 day intervals or as needed depending on disease severity.
	Bacteri Spot, Anthrac Gray Le Mold & Septori Leaf Sp	lbs enose, eaf	Begin application when disease first threatens and repeat at 7-10 day intervals or as needed depending on disease severity. Use higher rate for severe disease. NOTE: May be combined with 1.1-1.6 quarts per acre of Manex or combination product of maneb and zinc (80% active compound) When Manex or the combination product of zinc and maneb is used in tank mixture with KOP-50% W.P. do not apply within 5 days of harvest.

VINES				
Crop	Disease	Rate/A	Use Instructions	
Blackberries	Leaf and Cane Spot	4 lbs	Apply delayed dormant spray after training in the spring. Make fall application after harvest. Add l quart of crop oil per acre.	
Cranberry	Fruit Rot	8 lbs	Make first application in late bloom. One or two additional applications at 10-14 day intervals may be required depending on disease severity.	

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Crop	Disease	Rate/A	Use Instructions	
Currants, Gooseberry	Leaf Spot	10 Ibs	Make three applications starting after harvest followed by application before bloom, and after petal fall.	
Grapes	Black Rot, Powdery Hildew & Downy Milde	2 lbs	Begin application at bud break with subsequent application throughout the season depending upon disease severity. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara, and Rosette. Either test for sensitivity or add 1-3 lbs of hydrated lime/lb of KOP-50% W.P.	
Hops	Downy Mildew	2 lbs	Make crown treat- ment after pruning, but before training. After training, additional treatment are needed at about 10 day intervals. NOTE: Discontinue use 2 weeks before harvest.	
Raspberries (Except California)	Leaf and Cane Spot	4 lbs	Apply delayed dormant spray after training in the spring. Make fall application after harvest. Add 1 quart of crop oil per acre.	
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ORNAMENTALS

For control of disease on ornamentals in Greenhouses, Field and Nurseries - Apply as a thorough coverage spray using 1 pound KOP-50% W.P. per 100 gallons of water. Begin application at first sign of disease and repeat at 7 to 14 day intervals as needed; use shorter interval during periods of frequent rains or when severs disease conditions persist.

One level teaspoon of KOP-50% W.P. per gallon of water is equivalent to one pound per 100 gallons.

KOP-50% W.P. may be used as a maintenance spray. KOP-50% W.P. may be used alone or in combination with other fungicides such as the dithiocarbamates.

Crop	Disease			
Aralia	Xanthonas & Cercospora leafspots, Alternaria			
Azalea*	Cercospora leafspot, Botrytis blight, Phytophthora dieback and Powdery Mildew			
Besonia Bulbs (Easter Lily, Tulip, Gladiolus)	Xanthomonas leafspot, Anthracnose Botrytis Blight			
Carnation*	Alternaria blight, Pseudomonas leaf- spot and Botrytis blight			
Chrysanthemum*	Septoria leafspot and Botrytis blight			
Cotoneaster	Botrytis blight			
Euonymus	Botrytis blight, Anthracnose			
Ivy*	Xanthomonas leafspot			
Pachysandra	Volutella leaf blight			
Periwinkle	Phomopsis stem blight			
Pyracantna	Fireblight, scab			
Rose*	Powdery mildew, black spot			
Yucca (Adam's needle)	Cercospora and Septoria leafspot			

*Discoloration of foliage and/or blooms have been noted on some varieties. To prevent residues on commercial plants, do not spray just before selling season.

NOTE: Phytotoxicity may depend on varietal differences. If unfamiliar with the use of KOP-50% W.P. apply the recommended rate on a few plants and observe after 7 to 10 days for symptoms of phytotoxicity.

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STORAGE AND DISPOSAL

Do Not Contaminate Water, Food or Feed By Storage Or Disposal.

Store in a cool, dry place.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

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

WARRANTY - CONDITION OF SALE

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

In no case shall Drexel or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by Dremel Chemical Company and is accepted as such by the Buyer.

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