

LIQUID

COPPER FUNGICIDE

TRUSTED SINCE 1926

BONIDE[®]

Controls listed plant diseases

Concentrate



using low concentrations of copper

For roses, fruits & vegetables

ACTIVE INGREDIENT:

Copper Octanoate (Copper Soap)

CAS Reg. No. 20543-04-8..... 10.00%

OTHER INGREDIENTS:.....90.00%

TOTAL:.....100.00%

Metallic copper equivalent..... 1.8%

EPA Est. No. 4-NY-1 EPA Reg. No. 67702-2-4

Intended For Residential Use Only

Keep Out Of Reach Of Children

CAUTION

(See back booklet for additional
Precautionary Statements and First Aid)

Net Contents 16 FL OZ (473 ML)



811



FOR ORGANIC
GARDENING

LIQUID COPPER FUNGICIDE CONCENTRATE

- Where to use: Vegetables, Fruits, Nuts, Herbs, Ornamentals and Turf
- Can be used up to the Day of Harvest
- Controls Powdery Mildew, Downey Mildew, Black Spot and Rust
- Controls Peach Leaf Curl

Contains Cueva™ Fungicide Concentrate, a trademark of W. Neudorff GmbH KG

Manufactured under a license of W. Neudorff GmbH KG, Germany.

EPA Est. No. 4-NY-1

EPA Reg. No. 67702-2-4



NEUDORFF

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Distributed by
Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424

Pint



DIRECTIONS FOR USE

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

Read and follow all applicable directions and precautions on this label before using.

Do not allow adults, children or pets to enter the treated area until sprays have dried. Do not apply this product in a way that will contact adults, children or pets, either directly or through drift.

APPLICATION DIRECTIONS

Shake well before use. Most conventional liquid pesticide plant sprayers can be used to apply this product to plants. Mix 0.5 to 2.0 fluid ounces of this product in a gallon of water. Unless otherwise stated in specific application notes, apply 1.1 to 2.3 gallons of diluted spray per 1,000 ft². For best control, start spraying before the disease is visible or when disease is first visible on the plant. Spray all plant parts thoroughly (top and bottom of leaves), and repeat every 7 to 10 days. Use the higher rate to control diseases that may go dormant and overwinter. See application notes for the specific crop application interval. If possible, time applications so that at least 12 hours of dry weather follows application. Reapply after rain, following the application interval in the application notes.

APPLICATION DIRECTIONS Cont.

When **powdery mildew** presence is expected on a plant, spray the plants at the minimum application interval during the first 2 weeks after emergence.

To control **downy mildews, leaf and fruit spots, blights, and rust**, begin treatment 2 weeks before disease normally appears or when weather forecasts predict a long period of wet weather. Alternatively, begin treatment when disease first appears, and repeat as long as needed.

To prevent **fruit rots**, apply at the start of flowering and continue every 7 to 10 days until harvest. Fungicidal sprays are especially warranted when weather forecasts predict a long period of wet weather.

ORNAMENTALS: DISEASES CONTROLLED, LISTED BY PLANT

Ornamental Plant	Common Name	Diseases Controlled
<i>Aechmea fasciata</i>	Urn plant, bromeliad	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight
<i>Aeschynanthus pulcher</i>	Lipstick vine	Botrytis blight, Leaf spot (fungal)
<i>Aglaonema</i> species	Chinese evergreen	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight, Soft rot

ORNAMENTALS: DISEASES CONTROLLED, LISTED BY PLANT Cont.

Ornamental Plant	Common Name	Diseases Controlled
<i>Anthurium</i> species	Tailflower	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight, Soft rot
<i>Aphelandra squarrosa</i>	Zebra plant	Botrytis blight, Leaf spot (fungal), Rhizoctonia blight
<i>Araucaria heterophylla</i>	Norfolk Island pine	Colletotrichum needle blight
<i>Asplenium nidus</i>	Bird's nest fern	Bacterial leaf spot and blight
<i>Brassaia actinophylla</i>	Schefflera	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
<i>Caladium</i> species	Caladium	Bacterial leaf spot and blight, Rhizoctonia blight
<i>Calathea</i> species	Rattlesnake plant	Bacterial leaf spot and blight, Leaf spot (fungal)
<i>Caryota mitis</i>	Fishtail palm	Bacterial leaf spot and blight, Leaf spot (fungal)
<i>Chamaedorea</i> species	various palms	Leaf spot
<i>Chrysalidocarpus lutescens</i>	Areca palm	Leaf spot

ORNAMENTALS: DISEASES CONTROLLED, LISTED BY PLANT Cont.

Ornamental Plant	Common Name	Diseases Controlled
<i>Cordyline terminalis</i>	Ti plant	Anthracnose leaf and fruit spot, Leaf spot (fungal)
<i>Chrysoanthus</i> species	Bromeliad, earthstar	Anthracnose leaf and fruit spot
<i>Dieffenbachia</i> species	Dieffenbachia	Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
<i>Dracaena</i> species	Dracaena, Corn plant	Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal)
<i>Epipremnum aureum</i>	Pothos, Devil's ivy	Bacterial leaf spot and blight, Rhizoctonia blight
<i>Euphorbia milii</i>	Euphorbia	Rhizoctonia blight
<i>Fatsia japonica</i>	Japanese fatsia	Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
<i>Ficus benjamina</i>	Weeping fig	Leaf spot (fungal)
<i>Ficus elastica</i>	India-rubber tree	Leaf spot (fungal), Botrytis blight
<i>Fittonia verschaffeltii</i>	Nerve plant	Rhizoctonia blight
<i>Hedra helix</i>	English ivy	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal), Rhizoctonia blight

ORNAMENTALS: DISEASES CONTROLLED, LISTED BY PLANT Cont.

Ornamental Plant	Common Name	Diseases Controlled
<i>Hoya carnosa</i>	Wax plant	Botrytis blight, Leaf spot (fungal), Rhizoctonia blight
<i>Maranta leuconeura</i>	Prayer plant	Leaf spot (fungal)
<i>Monstera deliciosa</i>	Swiss cheese plant	Bacterial leaf spot and blight, Anthracnose leaf and fruit spot, Rhizoctonia blight, Soft rot
<i>Nephrolepis exaltata</i>	Boston fern	Bacterial leaf spot and blight, Botrytis blight, Rhizoctonia blight
<i>Peperomia</i> species	Peperomia	Leaf spot (fungal), Rhizoctonia blight
<i>Philodendron</i> species	Philodendron	Anthracnose leaf and fruit spot, Botrytis blight, Leaf spot (fungal)
<i>Pilea</i> species	Aluminum plant	Bacterial leaf spot and blight, Anthracnose leaf and fruit spot, Leaf spot (fungal), Rhizoctonia blight
<i>Platyserium bifurcatum</i>	Staghorn fern	Bacterial leaf spot and blight, Rhizoctonia blight
<i>Polyscias</i> species	Aralia	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal)

ORNAMENTALS: DISEASES CONTROLLED, LISTED BY PLANT Cont.

Ornamental Plant	Common Name	Diseases Controlled
<i>Rhapis species</i>	Ladyfinger palm	Leaf spot (fungal)
<i>Rhoeo spathacea</i>	Oyster plant	Leaf spot (fungal)
<i>Saintpaulia ionantha</i>	African violet	Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal), Powdery mildew
<i>Sansevieria triafasciata</i>	Snake plant	Bacterial leaf spot and blight, Leaf spot (fungal)
<i>Schefflera arboricola</i>	Dwarf Schefflera	Bacterial leaf spot and blight, Leaf spot (fungal)
<i>Schlumbergera species</i>	Cactus	Leaf spot (fungal)
<i>Sedum species</i>	Sedum	Leaf spot (fungal)
<i>Spathiphyllum species</i>	Spathe flower	Leaf spot (fungal), Rhizoctonia blight
<i>Syngonium podophyllum</i>	Nephtytis	Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight
<i>Yucca species</i>	yucca	Leaf spot (fungal)

ORNAMENTALS AND TURF

Do not use more than 391 fl.oz./1000 sq. ft. per year on turf or more than 373 fl. oz./1000 sq. ft. per year on ornamentals. This product may cause some copper toxicity on some plant species. Before spraying a specific plant species consult your State Experiment Station or make a test spray.

Crop	Diseases Controlled	Application Notes
Pine	Needle blight	Mix at a rate of 0.5 to 2.0 fluid ounces of this product with one gallon water. Spray until needles are thoroughly wet with spray. Apply when new needles are just emerging.
Rose and Ornamental Shrubs (Such as; Crape Myrtle, Forsythia, Hydrangea, Willow, Mock-Orange, Deutzia, Pyracantha, Japanese quince, Abelia, Summersweet)	Blackspot, Downy mildew, Gray mold (Botrytis), Leafspots, Powdery mildew, Rust	This product may cause copper toxicity on some rose varieties. Copper toxicity appears as purple spots. For Black spot, mix at a rate of 1.44 fl. ozs. of this product per gallon of water. For Powdery Mildew, mix at a rate of 1.08 fl. ozs. of this product per gallon of water. In damp cool conditions (below 60°F), phytotoxicity is likely to occur with the use of this product.
Sycamore	Anthracnose leaf spot	Make first application just before buds begin to swell, and repeat twice, at 7-day intervals.

ORNAMENTALS AND TURF Cont.

Crop	Diseases Controlled	Application Notes
Turf	Ascochyta leaf blight, Cercospora leaf spots, Dollar spot	<p>Mix 1.5 to 6 fluid ounces with 2.5 gallons of water and apply to 1,000 sq. ft. For best control, begin treatment 2 weeks before disease normally appears. Alternatively, begin treatment when disease first appears, and repeat at 7 to 10 day intervals for as long as needed.</p> <p>To reduce Ascochyta leaf blight mow less frequently, only as necessary to maintain recommended height. Water before noon to allow grass to dry. Water thoroughly only as required to avoid moisture stress. Apply this product when disease first appears, and repeat at 7 to 10 day intervals for as long as needed. In frequently diseased areas, prune adjacent trees and shrubs to reduce turf shading and to improve air movement.</p>

ORNAMENTALS AND TURF Cont.

Crop	Diseases Controlled	Application Notes
Turf (continued)	Rust	To reduce rust mow frequently to reduce rust spore production. Water and fertilize lawn as required to avoid moisture and nutrient stress. Water before noon to allow grass to dry. Apply this product when disease first appears, and repeat at 7 to 10 day intervals for as long as needed. In frequently diseased areas, prune adjacent trees and shrubs to reduce turf shading and to improve air movement.

FRUITS AND VEGETABLES

Crop	Diseases Controlled	Application Notes
Bean, Pea	Anthracnose leaf and fruit spot, Ascochyta leaf and pod spot, Bacterial blights (halo, common and brown spot), Downy mildew, Gray mold (Botrytis), Powdery mildew, White mold (Sclerotinia)	Repeat application every 7-10 days if necessary. Do not apply more than 88 fl. oz. product/1000 sq. ft. per year for beans. Do not apply more than 73 fl. oz. product/1000 sq. ft. per year for peas.
Beet, Chard, Spinach	Cercospora leaf spot, Downy mildew, White rust, Powdery Mildew	Repeat application every 7-10 days if necessary. Do not apply more than 146 fl. oz. product/1000 sq. ft. per year for beets. Do not apply more than 73 fl. oz. product/1000 sq. ft. per year for spinach and chard.
Carrots	Alternaria leaf blight, Bacterial leaf blight, Cercospora leaf blight	Repeat application every 7-10 days if necessary. Do not apply more than 93 fl. oz. product/1000 sq. ft. per year for carrots.
Celery and Celeriac	Bacterial leaf spot, Cercospora (early) blight, Septoria (late) blight	Repeat application every 7-10 days if necessary. Do not apply more than 98 fl. oz. product/1000 sq. ft. per year.

FRUITS AND VEGETABLES Cont.

Crop	Diseases Controlled	Application Notes
Citrus (Grapefruit, Lemon, Lime, Orange, Pummelo, Tangerine)	Melanose spot, greasy spot, citrus scab, Alternaria brown spot, citrus canker, <i>Phytophthora</i> brown rot, and <i>Septoria</i>	Repeat every 2 weeks if necessary. May cause phytotoxicity if conditions are conducive, when mixed with other products, or when applied to citrus seedlings grown in greenhouses or shadehouses. Do not apply more than 235 fl. oz. product/1000 sq. ft. per year.
Corn	Alternaria blight, Anthracnose, Ascochyta leaf and pod spot, Bacterial blights (halo, common and brown spot), Bacterial leaf spot, Downy mildew, Gray mold, Southern leaf blight, Cercospora leaf blight, Common or Southern Rust, Gray Leaf Spot, Stewart's Wilt*, Bacterial Stalk Rot*	Repeat application every 7-10 days if necessary. Do not apply more than 78 fl. oz. product/1000 sq. ft. per year.

FRUITS AND VEGETABLES Cont.

Crop	Diseases Controlled	Application Notes
Crucifer Crops (Bok Choy, Broccoli, Brussels sprouts, Canola, Cauliflower, Cabbage, Kale, Kohlrabi, Mustard, Pak-Choi, Rape, Rutabaga, Turnip)	Alternaria blight, Bacterial leaf spot, Downy mildew, Powdery mildew, White mold (Sclerotinia)	Repeat application every 7-10 days if necessary. Do not apply more than 49 fl. oz. product/1000 sq. ft. per year.
Cucurbits (Cucumbers, Cantaloupe, Melons, Squash, Pumpkin, Zucchini)	Alternaria blight, Angular leaf spot, Anthracnose leaf and fruit spot, Downy mildew, Gray mold, Scab, Ulocladium leaf spot, Powdery mildew	For cucumbers grown in a greenhouse, apply this product 2 times per week in the first 2 weeks after emergence, followed by sprays every 7 days. Do not apply more than 97 fl. oz. product/1000 sq. ft. per year.
Currant and Gooseberry	Anthracnose leaf and fruit spot, Phyllosticta, Septoria leaf spots, Powdery mildew	Repeat application every 7-10 days if necessary. Do not apply more than 298 fl. oz. product/1000 sq. ft. per year.

FRUITS AND VEGETABLES Cont.

Crop	Diseases Controlled	Application Notes
Ginseng	Alternaria blight, Botrytis blight, Phytophthora, Powdery mildew	Repeat application every 7-10 days if necessary. Do not apply more than 97 fl. oz. product/1000 sq. ft. per year.
Herbs (basil, chives, coriander, dill, lavender, mint, parsley, rosemary)	Anthracnose, Alternaria blight, Bacterial Blight, Botrytis, Downy mildew, Leaf scorch, Leaf spot, Rhizoctonia Leaf blight	Repeat application every 10-14 days if necessary. Do not apply more than 49 fl. oz. product/1000 sq. ft. per year for chives, coriander, basil, lavender, mint and rosemary. Do not apply more than 73 fl. oz. product/1000 sq. ft. per year for dill. Do not apply more than 37 fl. oz. product/1000 sq. ft. per year for parsley.
Grapes	Downy mildew, Black rot, Phomopsis Cane and Leaf Spot, Powdery mildew, Gray mold (Botrytis)	Repeat application every 7-10 days if necessary. Do not mix this product with lime. Certain Vinifera and French Hybrid varieties may be sensitive to copper sprays resulting in marginal leaf burn. Before spraying these varieties, consult your State Experiment Station or make test sprays. Do not apply more than 373 fl. oz. product/1000 sq. ft. per year.

FRUITS AND VEGETABLES Cont.

Crop	Diseases Controlled	Application Notes
Hop	Anthracnose leaf and fruit spot, Cercospora leaf spot, Downy mildew, Powdery mildew	Repeat application every 10 days if necessary. Do not apply more than 49 fl. oz. product/1000 sq. ft. per year.
Lettuce, Chicory, Endive	Downy mildew, Septoria leaf spot, Powdery mildew, Bacterial soft rot and bottom rot	Repeat application every 7-10 days if necessary. Use lower rate when disease pressure is low or on copper sensitive varieties of lettuce. Do not apply more than 149 fl. oz. product/1000 sq. ft. per year.
Onion, Garlic, Leek, Shallot	Botrytis leaf blight, Downy mildew, Neck rot, Bacterial soft rot	Repeat application every 7-10 days if necessary. Do not apply more than 112 fl. oz. product/1000 sq. ft. per year.
Peanuts	Sclerotinia blight, Leaf spots (early and late), web blotch	Repeat application every 7-10 days if necessary. Do not apply more than 88 fl. oz. product/1000 sq. ft. per year.

FRUITS AND VEGETABLES Cont.

Crop	Diseases Controlled	Application Notes
Pome Fruits (Apples, Pears, Quince)	Anthracnose, Cedar Apple Rust, Fireblight, Scab, Sooty Blotch, Flyspeck, Quince Rust	For fireblight control, apply this product in the dormant period, during bloom, or in-season cover spray applications. Do not exceed one application during the fall, late dormant period. Do not exceed one application between silver tip and green tip growth stages. May cause russetting of susceptible apple varieties. Do not exceed 1 gallon of product per 100 gallons of water. Repeat application every 7-10 days if necessary. Do not apply more than 298 fl. oz. product/1000 sq. ft. per year.
Blackberry, Blueberry, Raspberry	Gray mold (Botrytis), Mucor fruit rot, Rhizopus fruit rot	Apply at the start of flowering and continue every 7 to 10 days until harvest. Do not apply more than 156 fl. oz. product/1000 sq. ft. per year for blueberries. Do not apply more than 186 fl. oz. product/1000 sq. ft. per year for blackberries and raspberries.

FRUITS AND VEGETABLES Cont.

Crop	Diseases Controlled	Application Notes
Stone Fruit Trees (Almond, Apricot, Cherry, Nectarine, Peach, Plum)	Bacterial canker (<i>Pseudomonas syringae</i>), Brown rot blossom blight, leaf and fruit spot, Bacterial leaf spot	For bacterial canker, apply as a dormant spray as buds begin to swell, repeating at the bud burst stage, and weekly thereafter as needed, up to six sprays. In the fall spray again at 10 and 80% leaf fall. For brown rot blossom blight apply full cover spray at delayed dormant (bud swell), popcorn, full bloom and petal fall stages. During wet weather additional bloom sprays may be necessary. Repeat application every 7-10 days as necessary. Do not apply more than 335 fl. oz. product/1000 sq. ft. per year.
	Anthracnose leaf and fruit spot, <i>Coryneum</i> blight, Peach leaf curl	Apply as a dormant spray in late fall to before bud break. Repeat application every 7-10 days if necessary.
Strawberry	Angular leaf spot, Leaf scorch, <i>Mycosphaerella</i> leaf spot, <i>Phomopsis</i> leaf blight, Powdery mildew, <i>Septoria</i> leaf spots	Spray 1 month after planting (or before flowering on established plants) and twice more at 7 to 10 day intervals.

FRUITS AND VEGETABLES Cont.

Crop	Diseases Controlled	Application Notes
Strawberry (continued)	Anthracnose fruit rot, Gray mold (Botrytis)	Apply at the start of flowering and continue every 7 to 10 days until harvest. Do not apply more than 152 fl. oz. product/1000 sq. ft. per year.
Tobacco	Blue Mold (Downy Mildew)	Repeat application every 10 days if necessary. Do not apply more than 149 fl. oz. product/1000 sq. ft. per year.
Tomato, Potato, Eggplant, Pepper	Anthracnose leaf and fruit spot, Bacterial speck, Bacterial spot, Cercospora leaf spot, Early blight, Gray mold, Late blight, Leaf mold, Septoria leaf spot	Repeat application every 7-10 days if necessary. Use the 2 fl. oz. per gallon of water dilution rate for late blight. Do not apply more than 149 fl. oz. product/1000 sq. ft. per year for tomatoes. Do not apply more than 466 fl. oz. product/1000 sq. ft. per year for potatoes. Do not apply more than 221 fl. oz. product/1000 sq. ft. per year for peppers. Do not apply more than 147 fl. oz. product/1000 sq. ft. per year for eggplants.
Walnut	Blight	Repeat application every 7-10 days if necessary. Do not apply more than 596 fl. oz. product/1000 sq. ft. per year.

***Not registered for use in California**

STORAGE AND DISPOSAL

Pesticide Storage: Store in a secure place, away from open fire or flame. Keep container closed and reseal after use. Product may be damaged by freezing. Do not store product below 4°C. If spilled, use absorbent materials and dispose of in an approved manner.

Pesticide Disposal and Container Handling: Nonrefillable container. Do not reuse or refill this container. **If empty:** Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

FIRST AID

IF IN EYES

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

IF ON SKIN OR CLOTHING

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

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 by a poison control center or doctor.
- Do not give anything to an unconscious person

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call the National Pesticide Information Center (NPIC) at 1-800-858-7378 Monday through Friday, 7:30 am to 3:30 pm (NPIC Web site: www.npic.orst.edu). During other times, call the poison control center 1-800-222-1222.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

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.

NOTICE TO BUYER - Seller warrants that this product conforms to the chemical description on this label and is reasonably fit for purposes stated on this label only when used in accordance with directions under normal use conditions. This warranty does not extend to use of this product contrary to label directions, or under abnormal use conditions, or under conditions not reasonably foreseeable to seller. To the extent consistent with applicable law, buyer assumes all risk of any such use. Seller makes no other warranties, either expressed or implied.

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