NEU1140F Copper Soap

Flowable Liquid Copper Fungicide

Active Ingredient:

Copper Octanoate (Copper Soap) 10.0% Inert Ingredients 90.0% **Total** 100.0%

metallic copper equivalent

EPA REG. NO. 67702-2 **Net Contents:**

ACCEPTED

as amended, for the egistered under BPA Reg. No.

EPA EST. 67702-WG

1.8%

KEEP OUT OF REACH OF CHILDREN CAUTION

	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 eyeCall a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	
IF SWALLOWED	-Call a poison control center or doctor immediately for treatment adviceHave person sip a glass of water if able to swallowDo not induce vomiting unless told to by a poison control center or doctorDo 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.

center or doctor or going for treatment.

PRECAUTIONARY STATEMENTS - Household

Hazards to Humans and Domestic Animals

Caution: Harmful if swallowed, absorbed through skin or inhaled. Wash thoroughly with soap and water after handling. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse.

Environmental Hazards

This product may be toxic to fish and aquatic organisms. Do not apply directly to water. Do not contaminate water by disposal of equipment washwaters.

PRECAUTIONARY STATEMENTS - Commercial Agriculture

Hazards to Humans and Domestic Animals

Caution: Harmful if swallowed, absorbed through skin or inhaled. Wash thoroughly with soap and water after handling. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE) Requirements: Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical resistance category selection sheet. Applicators and other handlers must wear: long-sleeved shirts, long pants, chemical resistant gloves made of any waterproof material, such as polyvinyl chloride, nitrile rubber or butyl rubber, and shoes plus socks.

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

User Safety Recommendations - Commercial Agriculture

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This product may be toxic to fish and aquatic organisms. 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 by disposal of equipment washwaters.

STORAGE AND DISPOSAL - Commercial Agriculture

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

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.

Disposal

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

Container Disposal: Triple rinse container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

STORAGE AND DISPOSAL - Household

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.

Disposal

If empty: Do not reuse this container. Place in trash or offer for recycling if available.

If partly filled: Call you local solid waste agency or 1-800-CLEAN-UP for disposal instructions. Never place unused product down any indoor or outdoor drain.

DIRECTIONS FOR USE - Commercial Agriculture

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 manner that will contact workers or other persons, either directly or through drift. Only protected workers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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

DIRECTIONS FOR USE - Household

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.

Agricultural Use Requirements

Use this product in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted-entry interval, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry-Restrictions: Do not enter or allow worker entry into treated areas during the restricted-entry interval of 4 hours.

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, wear: coveralls, shoes, socks and chemical-resistant gloves made of any waterproof material, such as polyvinyl chloride, nitrile rubber, or butyl rubber.

Non-Agricultural 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.

Keep unprotected persons out of treated areas until sprays have dried.

DIRECTIONS FOR USE - COMMERCIAL AGRICULTURE

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

Shake well before use. Most conventional liquid pesticide plant sprayers can be used to apply NEU1140F COPPER SOAP to plants. A spreader may be used to improve the spreading of NEU1140F COPPER SOAP on hard to wet plants.

Tank Mixing NEU1140F COPPER SOAP with Other Pesticides

Read and follow all applicable directions and precautions on the label of other products, before mixing with NEU1140F COPPER SOAP.

NEU1140F COPPER SOAP can be applied up to day of harvest. When tank-mixed with products, do not apply that product closer to harvest than is permitted or stated on the other product's label.

Pour NEU1140F COPPER SOAP into spray tank at least half filled with water using adequate agitation. When mixed with other products proven or known to be compatible, wettable powders should be added first, followed in order by flowables (such as NEU1140F COPPER SOAP), and then emulsifiable concentrates.

NEU1140F COPPER SOAP can be mixed with Bravo® (WP, 720, 500), Captan, Daconil® 2787, Ferbam, maneb (WP or Flowable), Dithane® M-45, Manzate® 200, sulfur (wettable or flowable), organo phosphates, Thiodan®, Bacillus thuringiensis Berliner, Guthion®, Pydrin®, Diazinon®, malathion for use on the crops listed on this label, 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. Do not mix NEU1140F COPPER SOAP with oil when applied to citrus. Do not mix NEU1140F COPPER SOAP with chelated or liquid fertilizers. Use caution when using product with other fungicides and insecticides. Observe all cautions and limitations on all products used in mixtures.

Directions for use on Vegetables, Herbs, Field Crops, Nuts, Fruits including Citrus and Berries-COMMERCIAL AGRICULTURE

Crop	Disease(s)	Application Notes	
	Controlled	Application Notes	
Bean, Pea	Anthracnose, Ascochyta leaf and pod spot, Bacterial blights (halo, common and brown spot), Downy mildew,	Mix 0.5 to 2.0 gallons of NEU1140F COPPER SOAP with 50 to 100 gallons of water for application by ground equipment or with 2 to 5 gallons of water for application by aircraft, and apply to one acre. Use sufficient water to ensure good coverage. For best	
Corn	Gray mold Southern leaf blight, Cercospora leaf blight	control, 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,	
Lettuce, Chicory, Endive, Artichoke	Downy mildew, Septoria leaf spot	and repeat at 7 to 10 day intervals for as long as needed. Use the 2.0-gallon rate of NEU1140F COPPER SOAP, applied every 7 days or less, following	
Pome Fruit Trees (Apple, Pear, Quince)	Scab, Sooty blotch, Flyspeck	heavy rain or when the amount of disease is increasing rapidly. If possible, time applications so that 12 hours of dry weather follow application.	
Tomato, Potato, Eggplant, Pepper	Anthracnose, Bacterial speck, Bacterial spot, Cercospora leaf spot, Early blight, Gray mold, Late blight, Leaf mold, Septoria leaf spot	Use 2.0 gallons NEU1140F COPPER SOAP in 50 to 100 gallons of water when spraying to control late blight.	
Bean, Pea Crucifer Crops (Broccoli, Brussel sprouts,	Powdery mildew	Mix 0.5 to 2.0 gallons of NEU1140F COPPER SOAP with 50 to 100 gallons of water and apply to one acre. Use sufficient water to ensure good	

Canola,		coverage. For best control, begin
Cauliflower,		treatment 2 weeks before disease
Cabbage, Kale,		normally appears. Alternatively, begin
Kohlrabi,		treatment when disease first appears,
Mustard, Pak-		and repeat at 7 to 10 day intervals for
Choi, Rape,		as long as needed. Use the 2.0-gallon
Rutabaga,		rate of NEU1140F COPPER SOAP,
Turnip),		applied every 7 days when the amount
Cucurbits		of disease is increasing rapidly. If
(Cucumbers,		possible, time applications so that 12
cantaloupe,		hours of dry weather follow application.
squash,		Hours of dry weather follow application:
,		On plants that are yenr susceptible to
pumpkin,		On plants that are very susceptible to
zucchini)		powdery mildew, such as greenhouse-
Currant,		grown cucumber, it is best to spray the
Gooseberry		plants twice a week during the first 2
Hop		weeks after emergence, and weekly
Lettuce, Chicory,	:	thereafter. On outdoor plants, reapply
Endive,		after rain.
Artichokes	D4i-14	
Stone Fruit Trees	Bacterial spot	
(Almond, Apricot,		
Cherry,		
Nectarine,		
Peach, Plum)		
Bean, Pea,	White mold	, , , , , , , , , , , , , , , , , , , ,
	(Sclerotinia)	NEU1140F COPPER SOAP at 25%
		bloom. Use 1.0 to 2.0 gallons of
		NEU1140F COPPER SOAP in 50 to
		100 gallons of water for application by
		ground equipment or with 2 to 5 gallons
		of water for application by aircraft, and
	.	apply to one acre.
Crucifer Crops	White mold	To reduce floral infection, apply
(Broccoli,	(Sclerotinia)	NEU1140F COPPER SOAP at 25%
Brussel sprouts,		bloom. Use 0.5 to 2.0 gallons per acre
Canola,		in sufficient water for adequate
Cauliflower,		coverage, usually 5 to 10 gallons per
Cabbage, Kale,		acre by aircraft or 50 to 100 gallons per
Kohlrabi,		acre by ground equipment.
Mustard, Pak-		
Choi, Rape,		
Rutabaga,		
Turnip)		
Beet, Chard,	Cercospora leaf	Mix 0.5 to 2.0 gallons of NEU1140F

Alternaria leaf blight, Bacterial leaf blight, Bacterial leaf blight, Cercospora leaf blight Bacterial leaf spot, Celery and Celeriac Celeriac Crucifer Crops (Broccoli, Brussel Sprouts, Canola, Cauliflower, Cabbage, Kale, Kohlrabi, Mustard, Pak-Choi, Rape, Rutabaga, Turnip) Cucurbits (Cucumbers, Cucurbits (Cucumbers, Cantaloupe, spunghin, zucchini) Alternaria blight, Bacterial leaf spot, Downy mildew, blight, Septoria leaf spot, Downy mildew, blight, Bacterial leaf spot, Downy mildew, blight, Bacterial leaf spot, Downy mildew, blight, Bacterial leaf spot, Downy mildew, contain or when the amount of disease increasing rapidly. If possible, time applications so that 12 hours of dweather follow application. For cucumbers grown in a greenhous apply NEU1140F COPPER SOAP times per week in the first 2 weeks afte emergence, followed by sprays every days. Anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, anthracnose, Downy mildew, Septoria leaf spots, Alternaria blight, anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, anthracnose, Downy mildew, Septoria leaf spots, Alternaria blight, anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, seab plant anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, seab plant anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, seab plant anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, seab plant anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, seab plant anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, seab plant anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, seab plant anthracnose, Phyllosticta, Septoria leaf spots, Alternaria blight, seab plant anthracnose, Phyllosticta, Septoria leaf spots, Phyllosticta, Septoria leaf spots, Phyllosticta, Septoria leaf spots, Phyllosticta, Septoria leaf spots, Ph	Spinach	spot, Downy	COPPER SOAP with 50 to 100 gallons
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soft rot		·	
Leaf scorch, Leaf		Leaf scorch, Leaf	
Onion, Garlic, spot	Onion, Garlic,	· '	

Leek, Shallot, Chives		
Parsley		
Beet, Chard, Spinach	Powdery mildew	Mix 0.5 to 2.0 gallons of NEU1140F COPPER SOAP with 50 to 100 gallons of water and apply to one acre. Use sufficient water to ensure good coverage. 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. Use the 2.0-gallon rate of NEU1140F COPPER SOAP, applied every 7 days when the amount of disease is increasing rapidly. If possible, time applications so that 12 hours of dry weather follow application.
Citrus (Grapefruit, Lemon, Lime, Orange, Pummelo, Tangerine)	Melanose, greasy spot, citrus scab, alternaria brown spot Red alga (florida), Melanose on fruit	spray. Repeat in late summer to control
		new algal colonies. Do not mix with oil when applying on citrus.
Grapes	Downy mildew, Black rot, Phomopsis cane, Leaf spot, Powdery mildew	Note: Do not mix NEU1140F COPPER SOAP 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. Mix 0.5 to 2.0 gallons per 100 gallons of water and apply to one acre. For best control, begin treatment when new

:		growth reaches ½ inch and repeat at 7 to 14 day intervals throughout the growing season. Mix 0.5 to 2.0 gallons per 100 gallons
	Gray mold	of water and apply to one acre. For best control begin treatment at the end of bloom and repeat at 7 to 14 day intervals.
Lettuce, Chicory, Endive, Artichoke	Bacterial soft rot and bottom rot	Mix 0.5 to 2.0 gallons in 100 gallons of water for application by ground equipment or with 2 to 5 gallons of water for application by aircraft, and apply to one acre. Begin treatment before disease is expected or when weather conditions favor disease development. Repeat every 7 to 10 days as needed. Use lower rate when disease pressure is low or on copper sensitive varieties of lettuce.
Pome Fruit Trees (Apple, Pear, Quince) NOTICE: NEU1140F COPPER SOAP as used in this	Anthracnose	Use 0.5 to 2 gallons of NEU1140F COPPER SOAP per 100 gallons of water for application by ground equipment or with 2 to 5 gallons of water for application by aircraft, and apply to one acre. Apply in mid-July. Use 0.5 to 2 gallons of NEU1140F
recommendation may cause russeting of Golden Delicious and similar susceptible apple varieties. Mild russeting of other varieties may occur. Preferred use is on non- bearing or processing varieties where	Cedar Apple Rust, Quince Rust	1
russeting is not a concern. On apples, do not exceed the rate of 1.0 gallon of	Fireblight	COPPER SOAP per 100 gallons of water for application by ground equipment or with 2 to 5 gallons of water for application by aircraft, and apply to one acre. Spray at silver tip

NEU1140F Copper Soap per 100 gallons of water. Small fruits (Blackberry, Blueberry, Raspberry, Strawberry)	Gray mold, Mucor fruit rot, Rhizopus fruit rot	and bud break and repeat on 3 to 5 day intervals as needed, up to petal fall. Use the lower rate if disease pressure is light and higher rate when conditions favor heavy disease pressure. Use 0.5 to 2.0 gallons in 100 gallons of water for application by ground equipment or with 2 to 5 gallons of water for application by aircraft, and apply to one acre. Apply at the start of flowering and continue every 7 to 10
Stone Fruit Trees (Almond, Apricot, Cherry, Nectarine, Peach, Plum)	Bacterial canker (Pseudomonas syringae), Brown rot, Blossom blight, Leaf and fruit spots Anthracnose, Coryneum blight, Peach leaf curl	water for application by aircraft, and
Strawberry	Angular leaf spot, Leaf scorch, Mycosphaerella leaf spot, Phomopsis leaf blight, Powdery mildew, Septoria leaf spots Anthracnose fruit rot, Gray mold	Use 0.5 to 2.0 gallons in 100 gallons of water and apply to one acre. Spray 1 month after planting (or before flowering on established plants) and twice more at 7 to 10 day intervals. Use 0.5 to 2.0 gallons of water and apply to one acre. Apply at the start of flowering and continue every 7 to 10 days until harvest.

Tobacco	Blue mold (Downy mildew)	NEU1140F COPPER SOAP can be used on tobacco in transplant beds or on field grown plants. For transplant beds mix 0.5 to 2.0 gallons with 50 to 100 gallons of water and thoroughly spray all leaf surfaces. For field grown plants mix 0.5 to 2.0 gallons with 50 to 100 gallons of water for application by ground equipment or with 2 to 5 gallons of water for application by aircraft, and apply to one acre. Use sufficient water to ensure good coverage. For best control, 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 at 7 to 10 day intervals for as long as needed. Use the 2.0-gallon rate of NEU1140F COPPER SOAP, applied every 7 days or less, following heavy rain or when the amount of disease is increasing rapidly. If possible, time applications so that 12 hours of dry weather follow application.
Walnuts	Blight	Mix 0.5 to 2.0 gallons per 100 gallons of water and apply at 500 gallons per acre in mature orchards. Make first application when leaflets start to unfold (prior to, but not later than, 1% pistulate bloom) and repeat weekly as needed, especially until seasonal rainfall stops. When rain threatens, additional applications are important, applied before or immediately after the rain.
Peanuts	Leaf spots (early and late), web blotch	Mix 0.5 to 2.0 gallons of NEU1140F

		to 14 days until harvest.
Peanuts	Sclerotinia blight	Mix 0.5 to 2.0 gallons of NEU1140F COPPER SOAP with 50 to 100 gallons of water for application by ground equipment or with 2 to 5 gallons of water for application by aircraft, and apply to one acre. Use sufficient water to ensure good coverage. Make first application at first bloom and repeat every 7 to 14 days until harvest. Use higher rates of NEU1140F COPPER SOAP where Sclerotinia blight infection is expected to be heavy.

Directions for Use on Ornamentals - COMMERCIAL AGRICULTURE

Shake well before use.

ORNAMENTAL PLANTS

The ornamental species listed below may be treated with NEU1140F COPPER SOAP. The diseases controlled have been designated with the following codes.

Code	Common name	Causal Pathogen
ANTH	Anthracnose	Colletotrichum, Glomerella
BOT	Botrytis blight	Botryfis cinerea
BLS	Bacterial leaf spot and blight	Erwinia, Pseudomonas, Xanthomonas
DM	Downy mildew	Plasmopara
LEAFSPOT	Leaf spot (fungal)	Acremonium, Alternaria, Cephalosporium, Cercospora, Colletotrichum, Corynespora, Curvularia, Dactylaria, Drechslera, Exserohilium, Glomerella, Myrothecium, Phyllosticta, Phytophthora
PM RHIZC SOFTROT	Powdery mildew Rhizoctonia blight Soft rot	Oidium Rhizoctonia Erwinia

Ornamental Plant	Common Name	Diseases Controlled
Aechmea faciata	Urn plant, bromeliad	ANTH, BLS
Aeschynanthus pulcher	Lipstick vine	BOT, LEAFSPOT
Aglaonema species	Chinese evergreen	ANTH, BLS, LEAFSPOT,
,	•	RHIZC, BLS, SOFTROT
Anthurium species	Tailflower	ANTH, BLS, LEAFSPOT,

Aphelandra squarrosa	Zebra plant	RHIZC, SOFTROT BOT, LEAFSPOT, RHIZC
Araucaria heterophylla	Norfolk Island pine	Colletotrichum needle blight
Asplenium nidus	Bird's nest fern	BLS
Brassaia actinophylla Caladium species	Schefflera Caladium	ANTH, BLS, LEAFSPOT, RHIZC BLS, RHIZC
Calathea species	Rattlesnake plant	BLS, LEAFSPOT
Caryota mitis	Fishtail palm	BLS, LEAFSPOT LEAFSPOT
Chamaedorea species Chrysalidocarpus lutescens	various palms Areca palm	LEAFSPOT
Cissus species	Grape ivy	ANTH, BOT, DM, PM, RHIZC
Codiaeum variegatum	Croton	ANTH, BLS
Cordyline terminalis	Ti plant	ANTH, LEAFSPOT
Chryptanthus species	Bromeliad, earthstar	ANTH
Dieffenbachia species	Dieffenbachia	BLS, LEAFSPOT, RHIZC
Dracaena species	Dracaena, Corn plant	BLS, BOT, LEAFSPOT
Epipremnum aureum	Pothos, Devil's ivy	BLS, RHIZC
Euphorbia milii	Euphorbia	RHIZC
Fatsia japonica Ficus benjamina	Japanese fatsia Weeping fig	BLS, LEAFSPOT, RHIZC LEAFSPOT
Ficus elastica	India-rubber tree	LEAFSPOT, BOT
Fittonia verschaffeltii	Nerve plant	RHIZC
Hedra helix	English ivy	ANTH, BLS, BOT,
riodia riom	English Hy	LEAFSPOT, RHIZC
Hoya carnosa	Wax plant	BOT, LEAFSPOT,
•	,	RHIZC
Maranta leuconeura	Prayer plant	LEAFSPOT
Monstera deliciosa	Swiss cheese plant	BLS, ANTH, RHIZC, SOFTROT
Nephrolepis exaltata	Boston fern	BSL, BOT, RHIZC
Peperomia species	Peperomia	LEAFSPOT, RHIZC
Philodendron species	Philodendron	ANTH, BOT, LEAFSPOT
Pilea species	Aluminum plant	BLS, ANTH, LEAFSPOT, RHIZC
Platycerium bifurcatum	Staghorn fern	BLS, RHIZC
Polyscias species	Aralia	ANTH, BLS, LEAFSPOT
Rhapis species	Ladyfinger palm	LEAFSPOT
Rhoeo spathacea	Oyster plant	LEAFSPOT
Saintpaulia ionantha	African violet	BLS, BOT, LEAFSPOT, PM

LEAFSPOT

Sansevieria triafasciata	Snake plant	BLS, LEAFSPOT
Schefflera arboricola	Dwarf Schefflera	BLS, LEAFSPOT
Schlumbergera species	cactus	LEAFSPOT
Sedum species Spathiphyllum species Syngonium podophyllium	Sedum Spathe flower Nephthytis	LEAFSPOT LEAFSPOT, RHIZC BLS, LEAFSPOT, RHIZC

yucca

NEU1140F COPPER SOAP can be used for controlling diseases on ornamentals grown under field conditions, in nurseries, greenhouses, interior landscapes and other sites. For control of these diseases on plants grown on a large scale, mix 0.5 to 2.0 gallons in 100 gallons of water, and apply to 1 acre. For plants grown on a small scale, mix 0.5 to 2.0 fluid ounces in 1 gallon of water, and spray all plant surfaces thoroughly. When necessary, repeat sprays every 7 to 10 days. NEU1140F COPPER SOAP 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.

PINE

Needle blight

Yucca species

Mix 0.5 to 2.0 gallons in 100 gallons of water and spray until needles are thoroughly wet with spray. Apply when new needles are just emerging. Make a second application 3 weeks later.

ROSE AND ORNAMENTAL SHRUBS (Such as Crape Myrtle, Forsythia, Hydrangea, Willow, Mock-Orange, Deutzia, Pyracantha, Japanese quince, Abelia, Summersweet)

Blackspot, Downy mildew, Gray mold, Leafspots, Powdery mildew, Rust

Mix 0.5 to 2.0 gallons NEU1140F COPPER SOAP in 100 gallons of water and spray to point of run-off. Begin treatment when new spring growth emerges and repeat every 7 to 10 days for as long as needed to control disease. NEU 1140F COPPER SOAP may cause copper toxicity on some rose varieties. Copper toxicity appears as purple spots.

SYCAMORE

Anthracnose

Mix 0.5 to 2.0 gallons in 100 gallons off water. Make first application just before buds begin to swell, and repeat twice at 7-day intervals.

Directions for Use on Turf-COMMERCIAL AGRICULTURE

NEU1140F COPPER SOAP is suitable for controlling diseases of turf in golf courses, turf farms, home lawns and other sites. For large areas, mix 0.5 to 2.0 gallons in 100 gallons of water and apply to 1 acre. For small areas mix 1.5 to 6 fluid ounces with 2.5 gallons of water and apply to 1000 ft². 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.

Ascochyta leaf blight, Cercospora leaf spots, Dollar spot

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 NEU1140F COPPER SOAP 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.

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 NEU1140F COPPER SOAP 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.

DIRECTIONS FOR USE - HOUSEHOLD

Application Directions

Shake well before use. Most conventional liquid pesticide plant sprayers can be used to apply NEU1140F COPPER SOAP to plants.

To control **powdery mildews**, use a solution of 0.5 to 2.0 fluid ounces of NEU1140F COPPER SOAP in a gallon of water. For best control, start spraying before the disease is visible or when mildew is first visible on the plant. Spray all plant parts thoroughly, and repeat every 7 to 10 days. On plants that are very susceptible to powdery mildew, such as greenhouse-grown cucumber, it is best to spray the plants twice a week during the first 2 weeks after emergence, and weekly thereafter. On outdoor plants, re-apply after rain.

To control downy mildews, leaf and fruit spots, blights, and rust, use a solution of 0.5 to 2.0 fluid ounces of NEU1140F COPPER SOAP in a gallon of water. Ensure that all surfaces of the plant are thoroughly sprayed. For best control, 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 at 7 to 10 day intervals for as long as needed. Re-apply after rain. Use 2 fluid ounces per gallon of water, sprayed every 7 days or less, following heavy rain or when the amount of disease is increasing rapidly. This higher rate should be used for preventing late blight on potato and related plants. If possible, time applications so that at least 12 hours of dry weather follows application.

To prevent **fruit rots**, use a solution of 0.5 to 2.0 fluid ounces of NEU1140F COPPER SOAP in a gallon of water. Ensure that all surfaces of the plant are thoroughly sprayed. 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. Re-apply after rain.

Directions for Use on Ornamentals and Turf-Household Diseases Controlled, Listed by Plant:

Ornamental Plant	Common Name	Diseases Controlled
Aechmea faciaa	Um plant,	Anthracnose leaf and fruit spot, Bacterial leaf spot
	bromeliad	and blight
Aeschynanthus pulcher	Lipstick vine	Botrytis blight, Leaf spot (fungal)
Aglaonema species	Chinese evergreen	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight, Soft rot
Anthurium species	Tailflower	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight, Soft rot
Aphelandra squarrosa	Zebra plant	Botrytis blight, Leaf spot (fungal), Rhizoctonia blight
Araucaria heterophylla	Norfolk Island pine	Colletotrichum needle blight
Asplenium nidus	Bird's nest fern	Bacterial leaf spot and blight
Brassaia actinophylla	Schefflera	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
Caladium species	Caladium	Bacterial leaf spot and blight, Rhizoctonia blight
Calathea species	Rattlesnake plant	Bacterial leaf spot and blight, Leaf spot (fungal)
Caryota mitis	Fishtail palm	Bacterial leaf spot and blight, Leaf spot (fungal)
Chamaedorea species	various palms	Leaf spot
Chrysalidocarpus lutescens	Areca palm	Leaf spot
Cissus species	Grape ivy	Anthracnose leaf and fruit spot, Botrytis blight, Downy mildew, Powdery mildew, Rhizoctonia blight
Codiaeum variegatum	Croton	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight
Cordyline terminalis	Ti plant	Anthracnose leaf and fruit spot, Leaf spot (fungal)
Chryptanthus species	Bromeliad, earthstar	Anthracnose leaf and fruit spot
Dieffenbachia species	Dieffenbachia	Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
Dracaena species	Dracaena, Com plant	Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal)

Epipremnum aureum	Pothos, Devil's ivy	Bacterial leaf spot and blight, Rhizoctonia blight
Euphorbia milii	Euphorbia	Rhizoctonia blight
Fatsia japonica	Japanese fatsia	Bacterial leaf spot and blight, Leaf spot (fungal)
	·	Rhizoctonia blight
Ficus benjamina	Weeping fig	Leaf spot (fungal)
Ficus elastica	India-rubber tree	Leaf spot (fungal), Botrytis blight
Fittonia verschaffeltii	Nerve plant	Rhizoctonia blight
Hedra helix	English ivy	Anthracnose leaf and fruit spot, Bacterial leaf spot
		and blight, Botrytis blight, Leaf spot (fungal),
		Rhizoctonia blight
Hoya carnosa	Wax plant	Botrytis blight, Leaf spot (fungal), Rhizoctonia
		blight
Maranta leuconeura	Prayer plant	Leaf spot (fungal)
Monstera deliciosa	Swiss cheese	Bacterial leaf spot and blight, Anthracnose leaf
	plant	and fruit spot, Rhizoctonia blight, Soft rot
Nephrolepis exaltata	Boston fern	Bacterial leaf spot and blight, Botrytis blight,
		Rhizoctonia blight
Peperomia species	Peperomia	Leaf spot (fungal), Rhizoctonia blight
Philodendron species	Philodendron	Anthracnose leaf and fruit spot, Botrytis blight,
		Leaf spot (fungal)
Pilea species	Aluminum plant	Bacterial leaf spot and blight, Anthracnose leaf
	}	and fruit spot, Leaf spot (fungal), Rhizoctonia
Oloh soorium hifumaatum	Cinches for	blight
Platycerium bifurcatum	Staghorn fern	Bacterial leaf spot and blight, Rhizoctonia blight
Polyscias species	Aralia	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal)
Rhapis species	Ladyfinger palm	Leaf spot (fungal)
Rhoeo spathacea	Oyster plant	Leaf spot (fungal)
Saintpaulia ionantha	African violet	Bacterial leaf spot and blight, Botrytis blight, Leaf
Campaana lonarana	Amount violet	spot (fungal), Powdery mildew
Sansevieria	Snake plant	Bacterial leaf spot and blight, Leaf spot (fungal)
triafasciata	- Trains plant	
Schefflera arboricola	Dwarf Schefflera	Bacterial leaf spot and blight, Leaf spot (fungal)
Schlumbergera	Cactus	Leaf spot (fungal)
species		
Sedum species	Sedum	Leaf spot (fungal)
Spathiphyllum species	Spathe flower	Leaf spot (fungal), Rhizoctonia blight
Syngonium	Nephthytis	Bacterial leaf spot and blight, Leaf spot (fungal),
podophyllium		Rhizoctonia blight
Yucca species	yucca	Leaf spot (fungal)

The ornamental and turf species listed may be treated with NEU1140F COPPER SOAP. Unless otherwise stated, mix 0.5 to 2 fluid ounces in one gallon of water and spray all plant surfaces thoroughly. When necessary, repeat sprays every 7 to 10 days. NEU1140F COPPER SOAP 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.

Directions for Use on Ornamentals and Turf-Household

Crop	Diseases Controlled	Application Notes
Pine	Needle blight	Mix at a rate of 0.5 to 2.0 fluid ounces of NEU1140F COPPER SOAP with one gallon water. Spray until needles are thoroughly wet with spray.

		Apply when new needles are just emerging.
Rose and Omamental 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	NEU 1140F COPPER SOAP 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 NEU 1140F COPPER SOAP per gallon of water. For Powdery Mildew, mix at a rate of 1.08 fl. ozs. of NEU 1140F COPPER SOAP per gallon of water. In damp cool conditions (below 60°F), phytotoxicity is likely to occur with the use of NEU 1140F COPPER SOAP.
Sycamore	Anthracnose leaf spot	Make first application just before buds begin to swell, and repeat twice, at 7-day intervals.
Turf	Ascochyta leaf blight, Cercospora leaf spots, Dollar spot	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. 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 NEU1140F COPPER SOAP 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.
	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 NEU1140F COPPER SOAP 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.

Directions for Use on Fruits and Vegetables-Household

Unless otherwise stated below, mix 0.5 to 2.0 fluid ounces of NEU1140F COPPER SOAP with 1 gallon of water. Use sufficient water to ensure good coverage. For best control, 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 at 7 to 10 day intervals for as long as needed. Use the higher rate, applied every 7 days or less, following heavy rain or when the amount of disease is increasing rapidly. If possible, time applications so that 12 hours of dry weather follow application.

Crop	Diseases Controlled	Application Notes
Bean, Pea	Anthracnose leaf and fruit spot,	

Beet, Chard, Spinach	Ascochyta leaf and pod spot, Bacterial blights (halo, common and brown spot), Downy mildew, Gray mold (Botrytis), Powdery mildew, White mold (Sclerotinia) Cercospora leaf spot, Downy mildew, White rust, Powdery Mildew	
Carrots	Altemaria leaf blight, Bacterial leaf blight, Cercospora leaf blight	
Celery and Celeriac	Bacterial leaf spot, Cercospora (early) blight, Septoria (late) blight	
Citrus (Grapefruit, Lemon, Lime, Orange, Pummelo, Tangerine)	Melanose spot, greasy spot, citrus scab, alternaria brown spot, Red alga (Florida)	Apply 1-3 weeks after petal fail. Repeat every 2 weeks if necessary until the fruit is 3 inches in diameter. Do not mix NEU1140F Copper Soap with oil when applied on any citrus.
Com	Southern leaf blight, Cercospora leaf spot	
Crucifer Crops (Broccoli, Brussels sprouts, Canola, Cauliflower, Cabbage, Kale, Kohlrabi, Mustard, Pak-Choi, Rape, Rutabaga, Tumip)	Alternaria blight, Bacterial leaf spot, Downy mildew, Powdery mildew, White mold (Sclerotinia)	
Cucurbits (Cucumbers, Cantaloupe, 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 NEU1140F COPPER SOAP 2 times per week in the first 2 weeks after emergence, followed by sprays every 7 days.
Currant and Gooseberry	Anthracnose leaf and fruit spot, Phyllosticta, Septoria leaf spots, Powdery mildew	
Ginseng	Alternaria blight, Botrytis blight, Phytophthora, Powdery mildew	
Grapes	Downy mildew, Black rot, Phomopsis Cane and Leaf Spot, Powdery mildew, Gray mold (Botrytis)	Do not mix NEU1140F COPPER SOAP 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.
Нор	Anthracnose leaf and fruit spot, Cercospora leaf spot, Downy mildew, Powdery mildew	
Lettuce, Chicory, Endive,	Downy mildew, Septoria leaf spot, Powdery mildew, Bacterial soft rot and bottom rot	Use lower rate when disease pressure is low or on copper sensitive varieties of lettuce.

Onion, Garlic, Leek, shallot, Chives	Botrytis leaf blight, Downy mildew, Neck rot, Bacterial soft rot	
Parsley	Leaf scorch, Leaf spot	
Peanuts	Sclerotinia blight, Leaf spots (early and late), web blotch	
Pome Fruit Trees (Apple, Pear, Quince)		NOTICE: NEU1140F COPPER SOAP as used in this recommendation may cause russeting of Golden Delicious and similar susceptible apple varieties. Mild russeting of other varieties may occur. Preferred use is on non-bearing or processing varieties where russeting is not a concem. On apple do not exceed the rate of 1.0 fluid ounces NEU1140F per gallon water.
	Anthracnose leaf and fruit spot Cedar Apple Rust, Quince Rust	Apply in mid-July. The disease can also be reduced by removing nearby eastern red cedar plants (Juniperus virginiana L.). On juniper, cedar apple rust can be controlled by spraying plants at least 4 times between late August and late October.
	Fireblight	Spray at silver tip and bud break and repeat on 3 to 5 day intervals as needed, up to petal fall. Use the lower rate if disease pressure is light and higher rate when conditions favor heavy disease pressure.
	Scab, Sooty Blotch, Flyspeck (fruit and leaf spots)	Treat up to blossom drop. Use after blossom drop will cause russeting.
Small Fruits (Blackberry, Blueberry, Raspberry, Strawberry)	Gray mold (Botrytis), Mucor fruit rot, Rhizopus fruit rot	Apply at the start of flowering and continue every 7 to 10 days until harvest.
Stone Fruit Trees (Almond, Apricot, Cherry, Nectarine, Peach, Plum)	Bacterial canker (Pseudomonas syringae), 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.
	Anthracnose leaf and fruit spot, Coryneum blight, Peach leaf curl	Apply as a dormant spray in late fall during a period of dry weather.

Strawberry	Angular leaf spot, Leaf scorch, Mycosphaerella leaf spot, Phomopsis leaf blight, Powdery mildew, Septoria leaf spots	Spray 1 month after planting (or before flowering on established plants) and twice more at 7 to 10 day intervals.
	Anthracnose fruit rot, Gray mold (Botrytis)	Apply at the start of flowering and continue every 7 to 10 days until harvest.
Tobacco	Blue Mold (Downy Mildew)	
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	
Walnuts	Blight	

(The following information may or may not be placed, in whole or in part, on the final label:

- -This bottle will treat XXXXX sq.ft.
- -Copper Soap Fungicide
- -For Roses, Fruits & Vegetables
- -Controls Powdery Mildew, Black Spot & Rust!
- -Where to use
- -Ornamentals and Turf
- -Vegetables, Fruits, and Nuts
- -Manufactured under a license of Neudorff.
- -For household use only.
- -Fixed copper is one of the oldest fungicides and bactericides, used to control a wide range of plant diseases. NEU1140F COPPER SOAP is a patented, fixed copper fungicide, made by combining a soluble copper fertilizer with a naturally occurring fatty acid. The copper and the fatty acid combine to form a copper salt of the fatty acid, known technically as a true soap. The copper soap fungicide controls many common diseases using low concentrations of copper, down as low as 90 ppm. The net result is an excellent vegetable, fruit and ornamental fungicide. NEU1140F COPPER SOAP decomposes to form soluble copper, and fatty acid, both of which can be used by microbes and plants. NEU1140F COPPER SOAP is suited for use in domestic circumstances, both indoors and outdoors.
- -Decomposes to a form useful to plants & microbes.
- -NEU1140F COPPER SOAP controls diseases of a wide range of plants, including many vegetables, fruit and ornamentals. As with most fungicides, NEU1140F COPPER SOAP acts to protect plants from infection. Therefore, it is important to have NEU1140F COPPER SOAP on the leaf, flower or fruit before the pathogen is able to cause an infection.
- -A wide range of bacteria and fungi attack plants, however, they generally only cause a few types of diseases. When using NEU1140F COPPER SOAP, it is important to identify the type of disease in order to use the best method of disease control.

- -Powdery mildews tend to occur on the upper leaf surfaces, as though a white powder was sprinkled onto the plant. Powdery mildews can form a dense, white, cottony mass, making the whole leaf appear white. They are also commonly found on stems. Powdery mildews rarely kill plants. Most fungal diseases require water to infect plants. Powdery mildews are unique in that they do not require water for infection. Hence, under greenhouse conditions, powdery mildews can become severe. Shade and dense plantings also promote powdery mildew. Powdery mildews commonly occur on the following plants: apple, bean, beet, broccoli, brussel sprouts, cauliflower, cabbage, cantaloupe, chard, chicory, chive, cucumber, currant, endive, gooseberry, grape, grasses, hop, kale, kohlrabi, lettuce, lilac, oak, pea, pumpkin, rose, rutabaga, spinach, squash, strawberry, turnip, zucchini and many other plant species.
- **-Downy mildews** tend to occur on the lower leaf surfaces. Downy mildews are much finer than powdery mildews, and appear as fine white cotton, similar to duck down. Downy mildews can rapidly kill plant leaves during wet, cool weather, but are inhibited by hot dry weather. Downy mildews commonly occur on the following plants: bean, beet, broccoli, brussel sprouts, cauliflower, cabbage, cantaloupe, chard, chicory, chive, corn, cucumber, endive, garlic, grape, grasses, hop, kale, kohlrabi, leek, lettuce, onion, pea, pumpkin, rutabaga, shallot, spinach, squash, sunflower, tobacco, turnip, zucchini and many other plant species,
- -Leaf and fruit spots are small brown or black spots on the leaf or fruit. They commonly occur on apple and pear (scab), as well as on most of the plants grown around the home and in the garden. These spots can be caused by a range of fungi and bacteria. Leaf and fruit spots are commonly caused by fungi belonging to the following genera: Alternaria, Cercospora, Colletotrichum, Cylindrosporium, Gloeosporium. Glomerella. Gnomonia. Marssonia. Mvcosphaerella (Didymella). Phomopsis. Phyllosticta. Septoria. and Sphaceloma. Spots on leaves and fruit can expand and grow together. Leaf spot pathogens require water to infect plants. During wet weather, spots can develop into a blight, very rapidly, killing leaves, flowers and stems.
- -Rusts are small orange blisters that appear on plant leaves, and that are full of orange powder. The orange powder is rust spores. Towards the end of the season, black spores are often produced. Rust is commonly found on grasses, currants and many other types of plants.
- -Fruit rots commonly occur on strawberries, raspberries, and other fruit. They appear as soft, rotten areas on the fruit. Often the causal fungus can be seen growing and producing spores on the surface of the rotting area. Rots are often caused by fungi belonging to the following genera: Aspergillus, Botrytis, Monilinia, Mucor, Penicillium, Rhizopus and Sclerotinia.

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-Cueva[™] is a trademark of W. Neudorff GmbH KG

- -Contains Cueva[™] Fungicide Concentrate, a trademark of W. Neudorff GmbH KG
- -Made with Cueva[™] Fungicide Concentrate, a trademark of W. Neudorff GmbH KG
- -For Organic Production

-Cultural Method to Assist in Reducing Plant Disease

Several common sense techniques can also be used to reduce plant disease. These include:

- Inspect the plants often for signs of disease or insect pests. Take appropriate measures when warranted.
- Promote healthy plant growth, but do not over fertilize.
- Do not grow the same types of plants in the same location in successive years.
- Control weed species around the garden that are related to the plant species that you are growing. Weeds are a source of plant pathogens.
- Space plants to ensure good airflow and drying after rain. Also, water plants in the morning to minimize the time that the plants are wet. Wet leaves, flowers and fruit promote infections by plant pathogens.
- Prune plants during dry weather to avoid wound infections.
- At the end of the growing season remove and compost all garden refuse.
 Garden refuse can act as a source of plant pathogens.]

The registrant may use one of these optional statements, either: "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. Buyer assumes all risk of any such use. Seller makes no other warranties, either expressed or implied.

OR

Unconditionally guaranteed by W. Neudorff GmbH KG. If for any reason you are not satisfied with this product, send proof of purchase to the address shown and we will gladly refund your purchase price."

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