Group MO1

# SPECIMEN LABEL

Fungicide



# NU-COP 30HB

## FUNGICIDE

Dry Flowable

AGRICULTURAL

ACTIVE INGREDIENT: Copper, present as copper hydroxide....30%

### **KEEP OUT OF REACH OF CHILDREN**

READ THE LABEL BEFORE USING



EYE IRRITANT REGISTRATION NO. 33329 PEST CONTROL PRODUCTS ACT

ALBAUGH, LLC

1525 NE 36th Street Ankeny, IA 50021 USA 1-800-247-8013



AD012419

#### **GENERAL INSTRUCTIONS**

NU-COP 30HB is adaptable to spraying from all types of spray equipment. It can be used in high or low volume sprays. No additional surfactants are needed. Add NU-COP 30HB slowly to the spray tank partially filled with water. Spreader-stickers, insecticides, nutrients, etc. should be added last. NU-COP 30HB is compatible with commercially formulated spreader-stickers, non-herbicidal agricultural oils, and insecticides. The following specific instructions are based on general applications. However, the recommendations of local Agricultural Extension Specialists should be closely followed as to timing, frequency, and number of sprays per season.

#### **RESISTANCE MANAGEMENT RECOMMENDATIONS:**

For resistance management, please note that NU-COP 30HB contains a Group M01 Fungicide. Any fungal population may contain individuals naturally resistant to NU-COP and other Group M01 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance:

- Where possible, rotate the use of NU-COP 30HB or other Group M01 fungicides with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group when such use is permitted.
- Fungicide/bactericide use should be based on an IPM program that includes scouting, historical information related to pesticide use and crop rotation and considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide/bactericide applications.
- Monitor treated fungal/bacterial populations for resistance development. Notify Albaugh if reduced sensitivity of the pathogen to NU-COP 30HB is suspected.
- If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide/ bactericide with a different target site of action, if available.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information and to report suspected resistance, contact Albaugh at 1-800-247-8013.

#### **DIRECTIONS FOR USE:**

**PEPPERS:** Suppression of Bacterial Spot (*Xanthomonas campestris* pv. *vesicatoria*). When disease threatens, apply 1.47 kg/ha at 7 to 14 day intervals depending on disease severity. Do not apply to crops within 2 days of harvest.

#### PEPPERS (GREENHOUSE SEEDLINGS FOR TRANSPLANT): Suppression of Bacterial Spot

(Xanthomonas campestris pv. vesicatoria). Apply NU-COP 30HB at 1.86 kg/ha every 5 days when warranted to a maximum of 5 applications over a 4 week period prior to transplant.

Following transplantation to the field, when disease threatens, apply NU-COP 30HB at 1.86 kg/ha at 7 to 10 day intervals depending upon disease severity. Do not apply to crops within 1 day of harvest. Do not re-enter treated area for 24 hours.

**POTATOES:** Suppression of Early Blight (*Alternaria solani*) and Late Blight (*Phytophthora infestans*). Apply at 7 to 10 days intervals starting when plants are 15 cm high until harvest. Apply NU-COP 30HB at 0.47 - 0.93 kg/ha, depending on density of foliage. NU-COP 30HB can be combined with MANZATE® DF Fungicide or MANZATE® Pro-Stick Fungicide, at labelled rates, for control of early blight and late blight.

NU-COP 30HB at 1.4 kg/ha may be applied at vinekill with a desiccant or alone after vinekill, prior to harvest. This late treatment may reduce infection of tubers by the late blight fungus during harvesting. Do not apply within 2 days of harvest.

**TOMATOES:** Suppression of Early Blight (*Alternaria solani*). Apply 1.47 kg/ha NU-COP 30HB at 7 day intervals. For Suppression of Septoria Leaf Spot (*Septoria lycopersici*), apply at 1.31 kg/ha. Do not apply within 2 days of harvest.

**TOMATOES (GREENHOUSE SEEDLINGS FOR TRANSPLANT):** Suppression of Bacterial Spot. Apply NU-COP 30HB at 1.86 kg/ha every 5 days when warranted to a maximum of 5 applications over a 4 week period prior to transplant. Following transplantation to the field, when disease threatens, apply NU-COP 30HB at 1.86 kg/ha at 7 to 10 day intervals depending upon disease severity. Do not apply to crops within 1 day of harvest. Do not re-enter treated area for 24 hours.

**DO NOT** apply this product in a way that will contact workers or bystanders, either directly or through drift. Only protected handlers may be in the area during application.

**DO NOT** apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuarine/marine habitats.

Do not overspray or otherwise contaminate fish-bearing water bodies with runoff water from treated areas.

Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

DO NOT apply by air.

#### **Buffer zones**

Field sprayer application: **D0 NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **D0 NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. Boom height must be 60 cm or less above the crop or ground.

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrub lands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

	Method of Application	Use Site	Buffer Zones (meters) Required for the Protection of:				
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial habitat
			Less Than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
	Field Sprayer*	Potatoes, peppers	40	20	20	10	1
		Tomatoes	45	20	25	10	1

\* For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labeled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labeled buffer zone can be reduced by 30%.

#### **ENVIRONMENTAL HAZARDS**

TOXIC to birds, small wild mammals, aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

#### NOTE TO BUYER/USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than Albaugh LLC and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Albaugh LLC itself makes no representation or warranty with respect to product performance (efficacy) and crop tolerance (phytotoxicity) claims of this product when used on the crops listed. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Albaugh LLC harmless from any claims based on efficacy or phytotoxicity in connection with these uses.

#### **GREENHOUSE TOMATOES**

For suppression of bacterial canker in greenhouse tomatoes. Apply NU-COP 30HB in a preventative program. Apply 1.86 kg (558 g ai/ha) NU-COP 30HB to propagation house tomatoes every 5 days to a maximum of 5 applications over a 4 week period. Apply 1.86 kg (558 g ai/ha) NU-COP 30HB to production house tomatoes every 7 to 10 days.

Do not apply to crops within 1 day of harvest.

#### **PRECAUTIONS:**

**KEEP OUT OF REACH OF CHILDREN.** Fatal or poisonous if swallowed. Severely irritating to eyes. DO NOT get in eyes. Wear goggles, long pants, a long-sleeved shirt and shoes plus socks during mixing/loading, application, clean-up and repair. In addition, wear chemical-resistant gloves during mixing/loading, clean-up and repair. Wash hands before eating, drinking, smoking and using toilet. Keep out of any body of water; fish may be killed.

Remove personal protective equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

Remove clothing/personal protective equipment immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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

For cleaning/maintaining personal protective equipment, use detergent and hot water. Keep and wash personal protective equipment separately from other laundry.

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

If gloves are required on the label, wash the outside of gloves before removing.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval of 48 hours.

#### FOR GREENHOUSE USE:

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval of 24 hours.

At least one container or station designed specifically for flushing eyes must be available, and in operating condition with decontamination supplies, for workers entering the treated area. This container/station must remain available for at least seven days following application.

Applicators must post warning signs bearing the following information on all entrances to the greenhouse:

- The name of the product applied.
- The date and time of the application.
- "Product residues in the treated area may be highly irritating to the eyes."
- "Avoid contact of product residues with eyes."
- "If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes using the eye flush container [or eye flush station] located in the greenhouse. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice."
- The location of the eye flush container/station.
- Instructions on how to operate the eye flush container/station.

Signs must remain posted at least 7 days after treatment. Only the applicator(s) (or someone under their supervision) may remove warning signs.

#### FIRST AID

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

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 centre or doctor for treatment advice.

If Swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Take container, label or product name and Pest Control Registration Number with you when seeking medical attention.

#### **TOXICOLOGICAL INFORMATION**

Treat symptomatically.

For medical emergencies call 1-800-424-9300 (24 hours).

#### **DISPOSAL/DECONTAMINATION**

- 1. Completely empty bag into the spray mixture tank.
- 2. Follow provincial instructions for any required additional cleaning of container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. For information on the disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.