

2016-5655  
2016-11-17

GROUP	<b>M</b>	FUNGICIDE
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**KOCIDE® 101**  
FUNGICIDE

WETTABLE POWDER AGRICULTURAL FUNGICIDE

COPPER HYDROXIDE

CAUTION



POISON

GUARANTEE: Elemental copper present as copper hydroxide...50%  
Warning, contains the allergen sulfites.

**KEEP OUT OF REACH OF CHILDREN**

READ THE LABEL AND ATTACHED  
BOOKLET BEFORE USING  
SEE BACK PANEL FOR  
ADDITIONAL INFORMATION

REGISTRATION NO. 14417  
PEST CONTROL PRODUCTS ACT

Kocide LLC  
9145 Guilford Road, Suite 175  
Columbia, MD  
USA 21046  
1-800-250-5024

NET CONTENTS 5-25 KG  
DIRECTIONS FOR  
USE ENCLOSED

## **PRECAUTIONS**

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

Harmful if swallowed. Avoid contact with skin and eyes. Keep out of bodies of water; fish may be killed. 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.

Remove personal protective equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

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.

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

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit Croplife Canada's web site at : [www.croplife.ca](http://www.croplife.ca).

## **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 Product Registration Number with you when seeking medical attention.

## **TOXICOLOGICAL INFORMATION**

Unless extensive vomiting has occurred, empty the stomach by gastric lavage with water, milk, sodium bicarbonate solution, or a 0.1% solution of potassium ferrocyanide. (Gosselin, *Clinical Toxicology of Commercial Products*, 5th ed.). Administration of gastric lavage should be performed by qualified medical personnel. Probable mucosal damage may contraindicate use of gastric lavage.

For medical emergencies call 1-800-441-3637 (24 hours).

## **DISPOSAL**

1. Completely empty bag into spray mixture tank.
2. Make the empty bag unsuitable for future use.

3. Dispose of the bag in accordance with provincial requirements.
4. For information on disposal of unused, unwanted product, contact the Provincial Regulatory Agency or the manufacturer. 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. The user assumes the risk to persons or property that arises from any such use of this product.

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## DIRECTIONS FOR USE

Use KOCIDE 101 at 1.1- 4.5 kg/ha as noted. KOCIDE 101 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.

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 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: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO 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 shrublands), 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	40	20	20	10	1
	Cucumbers	20	10	10	5	1
	Beet	25	10	15	5	1
	Tomatoes	45	20	25	10	1
	Beans	35	15	20	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%.

Add KOCIDE 101 slowly to a spray tank partially filled with water. Spreader-stickers, insecticides, nutrients, etc. should be added last. KOCIDE 101 is compatible with commercially formulated spreader-stickers, non-herbicidal agricultural oils, and such insecticides as Rotenone and Parathion.

The following specific instructions are based on general applications. However, the recommendations of 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 Kocide 101 contains a Group M fungicide, which is generally considered to have a low risk of resistance development. However, as a general principal, it is recommended not to rely exclusively on the same product for pest control. To prolong effectiveness of this product, the following resistance management strategies should be followed. To delay fungicide resistance:

- Use tank mixtures with fungicides/bactericides 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 cultural, biological and other chemical control practices.
- If this product appears to be no longer effective for a pest which it previously controlled or suppressed, contact the manufacturer and your local extension specialist or certified crop advisor to assist in determining the cause of reduced performance.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops or pathogens.
- For further information or to report suspected resistance, contact Kocide LLC at 1-800-250-5024.

## SPECIFIC INSTRUCTIONS

**BEANS** *Bacterial Blight (Halo & Common)*. For protective sprays, apply first application when plants are 15 cm high. Apply on a 7 to 14 day schedule depending on local conditions, to a maximum of 6 applications per year. Use KOCIDE 101 at 2.25- 3.25 kg/ha depending on disease severity. Do not apply to crops within 2 days of harvest.

**CUCUMBERS** *Angular Leaf Spot*. Apply every 7 days once the plants begin to vine, to a maximum of 5 applications per year. Use KOCIDE 101 at 2.25-3.25 kg/ha. Do not apply to crops within 2 days of harvest.

**PEPPERS** *Bacterial Spot*. When disease threatens, apply KOCIDE 101 at 2.25-3.25 kg/ha at 7 to 14 day intervals depending on disease severity, to a maximum of 10 applications per year. Do not apply to crops within 2 days of harvest.

**PEPPERS (GREENHOUSE SEEDLINGS FOR TRANSPLANT)** *Bacterial Spot*. Apply KOCIDE 101 at 2.25 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 KOCIDE 101 at 2.25 kg/ha at 7 to 10 day intervals depending upon disease severity. Do not apply to crops within 1 day of harvest. Wear protective clothing including long-sleeved shirt, long pants and chemical-resistant gloves when handling or spraying the product. Do not re-enter treated area for 24 hours.

**POTATOES** *Early and Late Blight*. Apply at 7 to 10 day intervals starting when plants are 15 cm high until harvest. Use KOCIDE 101 at 1.1-2.25 kg/ha, depending on density of foliage, combined with 1.75- 2.25 kg of Mancozeb product per ha. KOCIDE 101 at 3.4 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. Maximum of 10 applications per year.

**SUGAR BEETS** *Cercospora Leaf Spot*. Start spray when disease threatens and continue for 4 to 5 applications. Spray every 10 to 14 days depending on conditions, using KOCIDE 101 at 2.25- 4.5 kg/ha depending on disease severity. Addition of suitable non-herbicidal agricultural oil is recommended at 5.5 L/ha. For specific instructions, consult local agricultural authorities. Do not apply to crops within 2 days of harvest. Maximum of 6 applications per year.

**TOMATOES** *Bacterial Spot*. When disease threatens, apply KOCIDE 101 at 2.25 kg/ha at 7 to 10 day intervals, more frequently when disease is severe to a minimum application interval of 3

days. KOCIDE 101 should be combined with 1.75- 2.25 kg/ha maneb or zinc-coordinated product of maneb (80% active compound). Do not apply to crops within 2 days of harvest. Maximum of 10 applications per year.

**TOMATOES (GREENHOUSE SEEDLINGS FOR TRANSPLANT) *Bacterial Spot*.** Apply Kocide 101 at 2.25 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 KOCIDE 101 at 2.25 kg/ha at 7 to 10 day intervals depending upon disease severity. KOCIDE 101 should be combined with 1.75-2.25 kg/ha maneb or zinc-coordinated product of maneb (80% active compound). Do not apply to crops within 1 day of harvest. Wear protective clothing including long-sleeved shirt, long pants and chemical-resistant gloves when handling or spraying the product. Do not re-enter treated area for 24 hours.

## **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.

## **PRECAUTIONS**

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

Harmful if swallowed. Avoid contact with skin and eyes. Keep out of bodies of water; fish may be killed. 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.

Remove personal protective equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

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.

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### **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 areas. 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 Ingested:** 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 Product Registration Number with you when seeking medical attention.

### **TOXICOLOGICAL INFORMATION**

Unless extensive vomiting has occurred, empty the stomach by gastric lavage with water, milk, sodium bicarbonate solution, or a 0.1% solution of potassium ferrocyanide. (Gosselin, *Clinical Toxicology of Commercial Products*, 5th ed.). Administration of gastric lavage should be performed by qualified medical personnel. Probable mucosal damage may contraindicate use of gastric lavage.

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