



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 20 2010

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Ms Pat Dinnen  
Syngenta Crop Protection  
P.O. BOX 18300  
Greensboro, NC 27419

Subject: Label Notification(s) for Pesticide Registration Notice 2007-4

Dear Registrant:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 dated September 3, 2009 for:

**EPA Registration 100-800**

**Mefenoxam / Bravo ®**

The Registration Division (RD) has conducted a review of this request for applicability under PRN 2007-4 and finds that the label change(s) requested falls within the scope of PRN-2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-5335 or Banza Djapao of my staff at 703-305-7269.

Sincerely,

A handwritten signature in cursive script that reads "Rachel C. Halloran".

Paul Mastradone, Acting Leader  
Notifications & Minor Formulations Team Leader  
Registration Division (7505P)  
Office of Pesticide Programs

 <b>United States</b> <b>Environmental Protection Agency</b> Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number <hr/> <b>Notification</b>
	<b>Application for Pesticide - Section I</b>	
	1. Company/Product Number 100-800	

2. EPA Product Manager Mary Waller	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Mefenoxam/Bravo	PM# 21
5. Name and Address of Applicant (Include ZIP Code) Syngenta Crop Protection, Inc. P. O. Box 18300 Greensboro, NC 27419  <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____ Product Name _____

**Section - II**

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application. <b>NOTIFICATION</b>
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below. <b>JUN 20 2010</b>

**Explanation:** Use additional page(s) if necessary. (For Section I and Section II.).

Notification of label change per PR Notice 2007-4. This Notification is consistent with the guidance of PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§156.10, 156.140, 156.144 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Syngenta is amending the Storage and Disposal section of the label by Notification according to the directions stated in PR Notice 2007-4.

**Section - III**

<b>1. Material This Product Will Be Packaged In:</b>				<b>2. Type of Container</b>	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
<b>*Certification must be submitted</b>		If "Yes" Unit Packaging wgt.    No. per Container	If "Yes" Unit Packaging wgt.    No. per container		
		5 lb.	1		
<b>3. Location of Net Contents Information</b> <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		<b>4. Size(s) Retail Container</b> 5 lb.		<b>5. Location of Label Directions</b> <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
<b>6. Manner in Which Label is Affixed to Product</b> <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input checked="" type="checkbox"/> Other <u>Pressure Sensitive</u>			

**Section - IV**

<b>1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)</b>		
Name Pat Dinnen	Title Label Group Leader	Telephone No. (Include Area Code) 316-602-2494
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		<b>6. Date Application Received (Stamped)</b>
<b>2. Signature</b> 	<b>3. Title</b> Regulatory Specialist	
<b>4. Typed Name</b> Pat Dinnen	<b>5. Date</b> September 3, 2009	

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Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, NC 27419-8300  
www.syngenta.com



**FedEx**

September 3, 2009

Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
Room S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, VA 22202-4501

Attention: Ms. Linda Arrington

**SUBJECT: MEFENOXAM/BRAVO®  
EPA REG. NO. 100-800  
NOTIFICATION OF LABEL CHANGE PER PR NOTICE 2007-4**

Syngenta Crop Protection, Inc. is submitting Notification for Mefenoxam/Bravo, EPA Reg. No. 100-800. Syngenta is amending the Storage and Disposal section of the label by Notification according to the directions stated in PR Notice 2007-4.

Attached are:

- One copy of the label with the changes clearly marked
- One unmarked copy of the label
- A CD of the unmarked copy of the label for "Electronic Comparison and Review"
- Certificate with Respect to Label Integrity Form
- Completed EPA Form 8570-1

Thank you in advance for approving this Notification. If you have any questions, please contact me at 336-632-2494.

Sincerely,

Pat Dinnen  
Label Group Leader  
Regulatory Affairs

Enclosures

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MASTER LABEL

**Mefenoxam/Bravo®**

**Fungicide**

For the control of certain diseases in carrots, broccoli, Brussels sprouts, cabbage, cauliflower, cucurbit vegetables, onions, potatoes, and tomatoes

Active Ingredients:

Mefenoxam* .....	4.5%
Chlorothalonil: Tetrachloroisophthalonitrile	72.0%
<hr/>	
Other Ingredients:	23.5%
Total:	100.0%

\*CAS Nos. 70630-17-0 and 69516-34-3

**NOTIFICATION**

Mefenoxam/Bravo is a wettable powder packaged in a water-soluble bag.

**JUN 2 0 2010**

See directions for use on side of container.

This outer protective container contains Mefenoxam/Bravo in an inner water-soluble bag. Entire inner bag and contents dissolve in water. After opening outer container, immediately dump entire unopened inner bag into the partially filled sprayer or mix tank. Do not handle the soluble bag or expose it to moisture, since this may cause rupturing.

**KEEP OUT OF REACH OF CHILDREN.**

**DANGER/PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements on left side of container.

EPA Reg. No. 100-800  
EPA Est. 62171-MS-1

5 pounds  
Net Weight

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>NOTE TO PHYSICIAN</b>	
If swallowed, probable mucosal damage may contraindicate gastric lavage. If in eye specialized ophthalmologic attention may be required. Persons having a temporary allergic reaction respond to treatment with antihistamines or steroid creams and/or systemic steroids.	
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
<b>HOTLINE NUMBER</b>	
For 24 Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call <b>1-800-888-8372</b>	

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## PRECAUTIONARY STATEMENTS

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### Hazards to Humans and Domestic Animals

#### DANGER/PELIGRO

Corrosive. Causes irreversible eye damage. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Do not breathe dust. Wear an respirator with an organic-vapor removing cartridge with a prefix approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter. Wear long-sleeved shirt and long pants, socks and shoes, goggles or face shield and chemical resistant gloves (such as or made out of any waterproof material; selection category A).

### Personal Protective Equipment (PPE)

#### Mixers, Loaders, Applicators and all other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Goggles or face shield
- Chemical-resistant gloves, such as barrier laminate or Viton®, gloves must be worn by: (1) mixers/loaders, (2) other handlers exposed to the concentrate, (3) cleaners/repairers of equipment, and (4) applicators using handheld equipment

- A respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

**Engineering Control Statements**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Water-soluble bags when used correctly qualify as a closed loading system under WPS. Handlers handling this product while it is enclosed in intact water-soluble bags are permitted to wear long-sleeved shirt, long pants, shoes and socks, and chemical-resistant gloves, provided the other PPEs are immediately available in case the bag is opened.

**User Safety Recommendations**

**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 if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**Environmental Hazards**

This product is toxic to aquatic invertebrates and wildlife. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply when weather conditions favor drift from treated area. Do not contaminate water when disposing of equipment wash waters or rinsate.

This product contains chemicals known to leach through soil into ground water under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Chlorothalonil can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poor draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

**Attention:** This product contains a chemical (chlorothalonil) known to the state of California to cause cancer.

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**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, INC. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## DIRECTIONS FOR USE

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

### AGRICULTURAL USE REQUIREMENTS

Use this product only 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) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 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 is:

- Coveralls
- Chemical-resistant gloves
- Shoes plus socks
- Goggles or face shield

**Special Eye Irritation Provisions:** Chlorothalonil is a severe eye irritant. Although the restricted-entry interval expires after 48 hours, for the next 6½ days entry is permitted only when the following safety measures are provided: (1) At least one container designed specifically for flushing eyes must be available in operating condition at the WPS-required decontamination site intended for workers entering the treated area. (2) Workers must be informed, in a manner they can understand:

- Residues in the treated area may be highly irritating to their eyes
- That they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes
- That if they do get residues in their eyes, they should immediately flush their eyes using the eyeflush container that is located at the decontamination site or using other readily available clean water, and
- How to operate the eye flush container

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL, CROP INJURY, AND/OR ILLEGAL RESIDUES.**

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## GENERAL INFORMATION

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Mefenoxam/Bravo contains 4.5% Mefenoxam active ingredient and 72% of the active ingredient chlorothalonil. Mefenoxam is a systemic fungicide that provides control of downy mildew and late blight diseases of selected crops. Chlorothalonil is a broad-spectrum protectant fungicide that controls many diseases of vegetables.

Maximum usage when applying both metalaxyl and mefenoxam containing products to the same crop within the same season: Do not apply more than the maximum seasonal total for the active ingredient as stated on the label of the product containing the lowest seasonal total on that crop.

**Note:** Mefenoxam active ingredient is a systemic fungicide having a specific mode of action and could be subject to development of insensitive strains of fungi. Development of insensitivity cannot be predicted. Therefore, SYNGENTA cannot assume liability for crop damage resulting from insensitive strains of fungi. If treatment is not effective following the use of Mefenoxam/Bravo as recommended, an insensitive strain of fungi may be present. If the treatment is ineffective due to the presence of a Mefenoxam insensitive strain of fungi, neither Mefenoxam/Bravo nor any other fungicide with similar action will effectively control that disease. Consideration should then be given to the prompt use of other types of suitable fungicides. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance in your particular crop and disease control situation. **THIS LABEL IS FOR FIELD USE ONLY AND IS NOT INTENDED FOR USE ON TRANSPLANT TRAYS, GREENHOUSES, LATH HOUSES, FLOAT HOUSES, HYDROPONIC PRODUCTION, OR IN BEDDING PLANT STRUCTURES.**

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## GENERAL USE PRECAUTIONS

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Do not apply this product in a way that will contact workers or other persons, or pets, either directly or through drift. Only protected handlers may be in the area during application.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

This product must not be applied within 150 ft. (for aerial and air-blast applications) or 25 ft. (for ground applications) of marine/estuarine water bodies unless there is an untreated buffer area of that width between the area to be treated and the water body.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all of these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

## **Aerial Drift Reduction Advisory Information**

[This section is advisory in nature and does not supersede the mandatory label requirements.]

### **Information on Droplet Size**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly, or under unfavorable conditions (see **Wind, Temperature**). Control droplet size by:

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets from other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and lowest drift potential.

### **Boom Length**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

### **Wind**

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

### **Temperature and Humidity**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

### **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high.

Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or

an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and quickly dissipates indicates good vertical air mixing.

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## MIXING PROCEDURES

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Mefenoxam/Bravo is an effective fungicide when used according to label directions for control of a broad spectrum of plant diseases. Thorough, uniform coverage is essential for disease control. Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. **Vigorous agitation is necessary to dissolve the bag and disperse the product. Maintain maximum agitation throughout the spraying operation.** Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

Amount of water needed per acre will vary with crop and amount of plant growth. Apply in a minimum of 20 gals./A for dilute sprays and 5 gals./A for concentrate ground sprays and aerial applications.

*Precaution: Water-soluble bags of Mefenoxam/Bravo must be completely dissolved and dispersed in plain water before any other tank-mix partner, including micronutrients or other liquid or dry fertilizers, are added to the spray solution. Boron, especially in the form of a micronutrient additive, such as Solubor®, etc., or as a natural component of the mix water, may prevent water-soluble bags from dissolving.*

**Mefenoxam/Bravo Alone:** Add 1/4 of the required amount of plain water to the spray or mixing tank. With the agitator running, drop the required number of unopened soluble bags of Mefenoxam/Bravo into the tank all at once. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the pouches have dissolved, and the material has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**Mefenoxam/Bravo + Tank Mixtures:** Mefenoxam/Bravo is compatible with many commonly used insecticides, fungicides, and spray adjuvants. If tank mixes are desired, observe all directions, precautions, and limitations on labeling of all products used. Consult compatibility charts or your local or state agricultural or turf authorities for compatibility information.

Do not combine Mefenoxam/Bravo with anything except water for application to watermelons unless your prior use has shown the combination to be noninjurious to water melons under your conditions of use

Add ¼ of the required amount of plain water to the spray or mixing tank. With the agitator running, drop the required number of **unopened** soluble bags of Mefenoxam/Bravo, and any other products packaged in water-soluble bags, into the tank all at once. After the water-soluble bags have dissolved and the products have completely dispersed uniformly into the mix water, continue to fill the tank with water. Then add the desired amount of other products recommended for tank mixture and allow them to become completely dispersed. Continue agitation while adding the remainder of the water and during application to maintain a uniform suspension.

### Preharvest Intervals

Unless otherwise stated in the directions for use for a specific crop, there is no preharvest interval.

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## APPLICATION INSTRUCTION

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Do not apply this product in a way that will contact workers or other persons, or pets, either directly or through drift. Only protected handlers may be in the area during application.

Mefenoxam/Bravo must be applied on the schedule specified in the specific crop use recommendations, not according to the irrigation schedule. If irrigation schedules are used, ground or aerial applications must supplement chemigation applications to achieve adequate disease control.

With the exception of potatoes, Mefenoxam/Bravo has not been sufficiently tested when applied through irrigation systems to assure consistent product performance for all labeled uses. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users should check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

### Application Through Irrigation Systems

Mefenoxam/Bravo alone or in combination with other fungicides which are registered for sprinkler irrigation may be applied through irrigation systems.

Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

### Center Pivot Irrigation Equipment

**Notes:** (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating Mefenoxam/Bravo through center pivot systems because of non-uniform application. (3) Plug the first nozzle closest to well head to protect water source.

1. Determine the size of the area to be treated.
2. Determine the time required to apply ¼-½ inch water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80-95% of the manufacturer's rated capacity.
3. Using water, determine the injection pump output when operated at normal line pressure.
4. Determine the amount of Mefenoxam/Bravo required to treat the area covered by the irrigation system.
5. Add the required number of Mefenoxam/Bravo soluble bags and sufficient water to meet the injection time requirements to the solution tank. (See **MIXING PROCEDURES** section of this label.)
6. Make sure the system is fully charged with water before starting injection of the Mefenoxam/Bravo solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
7. Maintain constant solution tank agitation during the injection period.
8. Stop injection equipment after treatment is completed. Continue to operate system until the Mefenoxam/Bravo solution has cleared the sprinkler head.

### **Solid Set, Hand Move, and Moving Wheel Irrigation Equipment**

1. Determine the acreage covered by the sprinklers.
2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20 to 30-minute time interval.
3. Determine the amount of Mefenoxam/Bravo required to treat the area covered by the irrigation system.
4. Add the required number of Mefenoxam/Bravo soluble bags into the same quantity of water used to calibrate the injection period. (See **MIXING PROCEDURES** section of this label.)
5. Operate system at the same pressure and time interval established during the calibration.
6. Inject Mefenoxam/Bravo at the end of the irrigation cycle or as a separate application to maximize retention of the fungicide by the foliage.
7. Stop injection equipment after treatment is completed. Continue to operate the system until the Mefenoxam/Bravo solution has cleared the last sprinkler head.

### **Posting Requirements**

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

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

All words shall consist of letters at least 2½ inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Worker Protection Standard.

### **Operating Instructions**

1. The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to

prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended.

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**CARROTS**

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Mefenoxam/Bravo, when used as a foliar spray in a preventive disease control program, provides effective control of cavity spot, Cercospora blight (early), and Alternaria blight (late). For season-long control of cavity spot, a preplant or at-planting application of Mefenoxam EC or Mefenoxam WSP is recommended. (See the **Root and Tuber Vegetable** section of the Mefenoxam EC or Mefenoxam WSP label for use directions.)

Apply 1½-2 lbs. of Mefenoxam/Bravo per acre beginning 40-50 days after the Mefenoxam EC or Mefenoxam WSP at-planting application. Make 2-4 applications of Mefenoxam/Bravo on a 14-day schedule.

**Note:** To avoid possible illegal residues, do not apply Mefenoxam/Bravo within 7 days of harvest. Do not exceed the equivalent of 15 lbs. a.i./A per season of chlorothalonil used alone or as a component of Mefenoxam/ Bravo.

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**COLE CROPS (BROCCOLI<sup>1</sup>, BRUSSELS SPROUTS, CABBAGE<sup>2</sup>, AND CAULIFLOWER ONLY)**

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<sup>1</sup>Broccoli, Chinese Broccoli (gai lan, white flowering broccoli)

<sup>2</sup>Cabbage, Chinese Cabbage (tight-heading varieties only)

Mefenoxam/Bravo, when used as a foliar application in a preventive disease control program, provides effective control of downy mildew and Alternaria leaf spot.

**Downy Mildew:** Apply 1½ lbs./A. Begin applications when conditions are favorable for disease, but before infection and continue at 14-day intervals until the threat of disease is over.

**Alternaria Leaf Spot:** Apply 1½ lbs./A. Begin applications when conditions are favorable for disease, but before infection, and continue at 14-day intervals until threat of disease is over. Under severe disease pressure, use other effective EPA-registered fungicides according to label directions between the Mefenoxam/Bravo sprays.

Notes: (1) To avoid possible illegal residues, do not apply within 7 days of harvest. (2) You may make up to 4 applications of Mefenoxam/Bravo per crop. (3) Do not exceed the equivalent of 12 lbs. a.i./A per season of chlorothalonil, whether used alone or as a component of Mefenoxam/ Bravo.

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**CUCURBIT VEGETABLES\***

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\*Cucumber, cantaloupe, casaba, crenshaw, honeydew melon, honey balls, muskmelon, Persian melon, watermelon, pumpkin, summer squash, winter squash, and cucurbit hybrids only.

Mefenoxam/Bravo, when used as a foliar spray in a preventive disease control program, provides effective control of many diseases of cucurbit vegetables. Avoid late season applications when plants reach full maturity or begin senescence.

**Downy Mildew:** Apply 2 lbs./A of Mefenoxam/Bravo. Begin applications when conditions are favorable for disease, but before infection, and continue at 14-day intervals until the threat of disease is over. The full rate of a protectant fungicide should be applied between Mefenoxam/Bravo applications. Avoid late season applications when plants reach full maturity and begin senescence.

**Anthracnose, Cercospora Leaf Spot, Gummy Stem Blight (Black Rot), Leaf Blight, and Scab:** Apply 2-3 lbs./A. Begin applications when conditions are favorable for disease, but before infection, and continue at 10 to 14-day intervals. Under severe disease pressure, alternate Mefenoxam/Bravo sprays with other effective EPA-registered fungicides every 7 days.

Note: You may make up to 4 applications of Mefenoxam/Bravo per crop. Do not exceed the equivalent of 15.75 lbs. a.i./A per season of chlorothalonil, whether used alone or as a component of Mefenoxam/Bravo.

Do not combine Mefenoxam/Bravo with anything except water for application to watermelons unless your prior use has shown the combination to be noninjurious to water melons under your conditions of use.

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**ONIONS - DRY BULB\*, GREEN\*\*, AND ONIONS GROWN FOR SEED**

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\*Includes garlic, onions (dry bulb), and shallots (dry bulb).

\*\*Includes green onions, leeks, spring onions or scallions, Japanese bunching onions, green shallots, or green eschalots.

Mefenoxam/Bravo, when used as a foliar spray in a preventive disease control program, provides effective control of downy mildew, Botrytis leaf blight, and purple blotch.

**Downy Mildew:** Apply 2 lbs./A. Begin applications when conditions are favorable for disease, but before infection, and continue at 14-day intervals until the threat of disease is over. Use a compatible spreader-sticker at rates recommended on the product label.

**Botrytis Leaf Blight (Blast) and Purple Blotch:** Apply 2 lbs./A on a 14-day schedule and apply other effective EPA-registered fungicides between the Mefenoxam/Bravo sprays; or apply 2 lbs./A of Mefenoxam/Bravo on a 7-day schedule.

**Notes:** (1) To avoid possible illegal residues, do not apply to dry bulb onions within 7 days of harvest or to green onions within 21 days of harvest. (2) You may make up to 4 applications of Mefenoxam/Bravo to dry bulb or seed onions. (3) You may make up to 3 applications of Mefenoxam/Bravo to green onions. If conditions for disease development are still favorable after making 3 applications of Mefenoxam/Bravo, use other fungicides registered for disease control in green onions. (4) Do not exceed the equivalent of 6.7 lbs. a.i./A per season of chlorothalonil, whether used alone or as a component of Mefenoxam/Bravo.

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## POTATOES

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Mefenoxam/Bravo, when used as a foliar application in a preventive disease control program, will provide effective control of late blight, caused by *Phytophthora infestans*, Pythium leak caused by *Pythium* spp., and pink rot caused by *Phytophthora erythroseptica*. Make applications of Mefenoxam/Bravo in sufficient water to obtain thorough coverage for ground applications and in a **minimum of 5 gals.** of water per acre for aerial applications.

It is recommended that this product be used within an Integrated Pest Management Program. Also, vine-kill should occur 14 days before harvest.

**Late Blight and Early Blight:** Apply 2.0 lbs. of Mefenoxam/Bravo per acre. Begin preventive applications early in the season when conditions are favorable for disease (before infection), but no later than when the plant foliage meets within the row uniformly across the field. In states other than FL, make up to 3 applications of Mefenoxam/Bravo at 14-day intervals. In FL only, make up to 4 applications at 14-day intervals. The labeled rate of a protectant fungicide should be applied between Mefenoxam/Bravo applications. Following the 3 or 4 Mefenoxam/Bravo applications, apply the labeled rate of a protectant fungicide on a weekly schedule through the remainder of the season.

**Storage Rots: Pythium Leak (caused by *Pythium* spp.) and Pink Rot (caused by *Phytophthora erythroseptica*):** For effective control of these storage rots, Mefenoxam/Bravo should be used in conjunction with other management practices such as crop rotation. Apply 2.0 lbs. of Mefenoxam/Bravo per acre. Make the first application at flowering and another one 14 days later. If the field has a history of storage rot problems, make a third application 14 days after the second application.

**Note:** If applications of Mefenoxam/Bravo are being made for late blight control that correspond to the timing of applications for storage rot control, additional applications for storage rot control are not needed.

**Notes:** (1) To avoid possible illegal residues, do not apply within 14 days of harvest. (2) In states other than FL, you may make up to 3 applications of Mefenoxam/Bravo per crop. In FL only, you may make up to 4 applications per crop. (3) If conditions for late blight development are still favorable after making 3 applications of Mefenoxam/Bravo, use other fungicides registered for late blight control in potatoes. (4) Do not exceed the equivalent of 6.7 lbs. a.i./A per season of chlorothalonil, whether used alone or as a component of Mefenoxam/Bravo.

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## TOMATOES

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Mefenoxam/Bravo, when used as a foliar spray in a preventive disease control program, provides effective control of several tomato diseases. Make applications of Mefenoxam/Bravo in sufficient water to obtain thorough coverage for ground applications and in a **minimum of 5 gals.** of water per acre for aerial applications.

**Late Blight and Fruit Rot Caused by *Phytophthora* spp.:** Apply 2.0 lbs. of Mefenoxam/Bravo per acre. Begin preventive applications early in the season when conditions are favorable for disease (before infection). In states other than FL, make up to 3 applications at 14-day intervals. In FL only, make up to 4 applications at 14-day intervals. The labeled rate of a protectant fungicide should be applied between Mefenoxam/Bravo applications. Following the 3 or 4 Mefenoxam/Bravo applications, apply the labeled rate of a protectant fungicide on a weekly schedule through the remainder of the season.

**Early Blight, Gray Leaf Spot, Gray Leaf Mold, and Septoria Leaf Spot:** Apply 2.0 lbs. of Mefenoxam/Bravo per acre. Begin preventive applications early in the season when conditions are favorable for disease (before infection). In states other than FL, make up to 3 applications at 14-day intervals. In FL only, make up to 4 applications at 14-day intervals. The labeled rate of a protectant fungicide should be applied between Mefenoxam/Bravo applications. Following the 3 or 4

Mefenoxam/Bravo applications, apply the labeled rate of a protectant fungicide on a weekly schedule through the remainder of the season.

**Anthracnose, Alternaria Fruit Rot (Black Mold), Rhizoctonia Fruit Rot, and Botrytis Gray Mold:**

Apply 2.0-3.0 lbs. of Mefenoxam/Bravo per acre. Begin preventive applications early in the season when conditions are favorable for disease (before infection). In states other than FL, make up to 3 applications at 14-day intervals. In FL only, make up to 4 applications at 14-day intervals. The labeled rate of a protectant fungicide should be applied between Mefenoxam/Bravo applications. Following the 3 or 4 Mefenoxam/Bravo applications, apply the labeled rate of a protectant fungicide on a weekly schedule through the remainder of the season.

**Note:** (1) To avoid possible illegal residues, do not apply within 14 days of harvest. (2) In states other than FL, you may make up to 3 applications of Mefenoxam/Bravo per crop. In FL only, you may make up to 4 applications per crop. (3) Do not exceed the equivalent of 15.1 lbs. a.i./A per season of chlorothalonil, whether used alone or as a component of Mefenoxam/ Bravo.

**ROTATION (PLANT BACK) RESTRICTIONS**

Do not plant any crop which is not registered for use with the Mefenoxam active ingredient in soil treated with this active ingredient for a period of 12 months, unless a shorter interval is specified on the following list.

Rotation Crop	Planting Time From Last Application of Mefenoxam/Bravo
Alfalfa (including birdsfoot trefoil), Almonds, Apples*, Asparagus, Avocados	0 days
Blueberries, Broccoli, Brussels sprouts	
Cabbage, Cauliflower, Chinese Broccoli (gai lon, white flowering broccoli), Chinese Cabbage (tight-heading varieties only), Citrus, Cotton, Cranberries, Cucurbit Vegetables	
Deciduous Fruits and Nuts*	
Eggplant	
Garlic, Ginseng, Grapes	
Grass Grown for Seed	
Hops	
Leafy Vegetables (except Brassica vegetables), Legume Vegetables (beans and peas - succulent and dried)	
Onions (Dry Bulb, Green, and Seed)	
Papaya, Peanuts, Peppers, Pineapples, Potatoes	
Raspberries, Root and Tuber Vegetables	
Soybeans, Spinach, Stone Fruits, Strawberries, Sugar Beets	
Tobacco, Tomatoes	
Walnuts	
Cereal Grains (except corn)	40 days
Corn	9 months
Crops Not For Food or Feed	0 days
All Other Crops For Food or Feed	12 months

\*These crops may be planted immediately following last application of Mefenoxam/Bravo, provided they will not bear harvestable fruit within 12 months.

**STORAGE AND DISPOSAL**

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

**Pesticide Storage**

Store in a cool, dry place. Do not store this product under wet conditions. Handle outer packaging carefully to avoid breakage of inner soluble bag.

**Pesticide Disposal**

Open dumping is prohibited. Wastes resulting from the use of this pesticide are acutely hazardous. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures.

For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

**Container Disposal/Handling**

Non-refillable container. Do not reuse or refill this outer container. Offer for recycling if available or dispose of empty outer foil pouch container in the trash as long as WSP is unbroken a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. Stay out of smoke from burning bags.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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Manufactured for:  
Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300

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