

33955-97

3/23/2001

5586735

1/9



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

MAR 23 2001

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Mr. Craig Martens  
PBI /Gordon Corporation  
P.O. Box 014090  
Kansas City, Missouri 64101-7925

Dear Mr. Martens:

Subject: Labeling Amendment  
Acme Bordeaux Mixture  
EPA Reg No 33955-97  
Your Correspondence Dated September 29, 2000

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable subject to the conditions indicated below. A stamped copy is enclosed for your records. Please submit one (1) copy of your final printed labeling before you release the product for shipment.

1. Under the Directions for Use/Application Instructions section, the following directions under the "Remarks" column need to be clarified.

a.. Yew: If a single application is intended, this should be indicated. If repeat applications are required to control twig blight, indicate when repeat applications should be made.

b. Blue spruce and Douglas fir: Indicate when to begin application and the schedule or frequency of repeat applications, if needed.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

2/9

If you have any questions regarding this letter, do not hesitate to contact me at (703) 305-7740 or Maria I. Rodríguez of my staff at (703) 305-6710.

Sincerely yours,

*/s/ cgp*

Cynthia Giles-Parker  
Product Manager #22  
Fungicide Branch  
Registration Division (7505C)

# ACME®

## BORDEAUX MIXTURE

For Disease Control on Evergreens, Shrubs, Shade Trees,  
Peonies, Flowers, and Fruit Trees.

**ACTIVE INGREDIENT:**

Copper, expressed as metallic, (In the form of Bordeaux Mixture) ..... 13.3%

**INERT INGREDIENTS:** ..... 86.7%

TOTAL 100.0%

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

**First Aid**

<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. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</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>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have a person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>NOTE TO PHYSICIAN:</b> Probable mucosal damage may contraindicate use of gastric lavage.	
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

See back panel for Precautionary Statements.

**NET WEIGHT (ONE, THREE, or FOUR) POUNDS**

531/ APXXXXXX  
EPA REG NO 33955-97  
EPA EST NO 2217-KS-1  
MANUFACTURED BY



**ACCEPTED  
with COMMENTS  
In EPA Letter Dated:  
MAR 23 2001**

**Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.**

33955-97

4/9



READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**DANGER:** Corrosive. Causes eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful if swallowed. May cause skin sensitization in certain individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**ENVIRONMENTAL HAZARDS:**

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater.

**DIRECTIONS FOR USE**

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

**STORAGE & DISPOSAL**

**STORAGE:** Store in original container in a locked storage area inaccessible to children or pets.

**PESTICIDE DISPOSAL:** Securely wrap original container in several layers of newspaper and discard in trash.

**CONTAINER DISPOSAL:** *For bags* - Do not reuse bag. Discard bag in trash. *For bottles, cans, jars* - Do not reuse container. Rinse thoroughly before discarding in trash.

Disease control is a combination of prevention and protective sprays. Begin applications at the first signs of disease infection or when disease threatens.

Acme® Bordeaux Mixture is made from equal parts of copper sulfate and lime. Eight pounds of this product mixed with 50 gallons of water yields a 4-4-50 Bordeaux mixture. An equivalent concentration can be prepared by mixing 16 pounds of product with 100 gallons of water yielding a 8-8-100 Bordeaux mixture.

**SPRAY PREPARATION:**

The spray mixture is prepared by dissolving the Acme® Bordeaux Mixture in one-half the required amount of water. After the product is dissolved completely with agitation, add the remainder of the water to the tank. The Bordeaux mixture must be agitated vigorously to prevent settling. Shake well before applying the spray mixture.

Two spray concentrations of 4-4-100 and 8-8-100 Bordeaux mixture are presented. Refer to the Directions For Use for the appropriate spray concentration. Use level spoonfuls in measuring. Use the higher amounts within the ranges if the container has been shaken to fluff the powder.

Amount of Acme® Bordeaux Mixture

Spray Volume	4-4-100	8-8-100
1 Pint	¾ to 1 tablespoon	1 to 1½ tablespoons
1 Quart	1½ to 1¾ tablespoons	2 to 3 tablespoons
1 Gallon	6 to 7 tablespoons	8 to 12 tablespoons
3 Gallons	1⅞ to 1¼ cupfuls	1½ to 2¼ cupfuls

3 teaspoonfuls equal 1 tablespoonful.

**APPLICATION INSTRUCTIONS:**

Plant	Disease	Application Rate, Tbs. /1 gal. water	Spray Concentration of Bordeaux Mixture	Remarks
<b>FRUIT, VEGETABLES, AND PECANS:</b>				
Apples	Late scab, black rot, bitter rot, & blotch	8 Tbs. product per 1 gal. water	8-8-100	A protective spray applied during bloom will help prevent infection. Treatments should not be applied after the ¼ inch green stage. May russet certain varieties. Do not spray tender foliage or during the early growing period when the leaf tissue is emerging from the bud. Repeat as necessary to maintain control.
Pears	Fire blight	4 Tbs. product per 1 gal. water	4-4-100	Bloom sprays are applied to control the blossom blight stage of this disease. Do not add insecticides or exceed this dosage rate. Repeat at 5 to 7 day intervals until the end of the blooming period.
Apricots, Plums, Sour Cherries	Bacterial leaf spot & brown rot	4 Tbs. product per 1 gal. water	4-4-100	Apply at the shuck split stage. Also, the same dosage can be used for the first and second cover sprays. Do not use on Japanese plums.
Peaches	Peach leaf curl	12 Tbs. product per 1 gal. water	8-8-100	Use dormant applications after the leaves have dropped in the fall or before the buds swell in the spring. Thorough coverage is essential.
Pecans	Pecan scab	6 Tbs. product per 1 gal. water	4-4-100	Apply when catkins show. Use three (3) or four (4) applications with 3 week intervals.
Grapes	Black rot & powdery mildew	6 Tbs. product per 1 gal. water	4-4-100	Apply at the early pre-bloom stage, post-bloom stage, and mid-summer stage. For the early bloom stage apply when the shoots are 18 inches long. For the post-bloom stage apply when 90% of blossoms have opened. For the mid-summer stage, apply during July and August depending upon the severity of the disease.
Potatoes	Early & late blight	8 Tbs. product per 1 gal. water	8-8-100	Apply when the plants are 3 to 4 inches in height. Repeat treatments at the same dosage rate at 10 to 14 day intervals during the entire growing season.
Strawberry	Leaf spot	6 Tbs. product per 1 gal. water	4-4-100	Apply at 10 to 14 day intervals from the pre-bloom stage until harvest. Begin treatments at the first sign of leaf spotting. Repeat treatments as long as disease continues.

6/5

**APPLICATION INSTRUCTIONS CONTINUED:**

Plant	Disease	Application Rate, Tbs. /1 gal. water	Spray Concentration of Bordeaux Mixture	Remarks
Citrus	Brown rot of lemons, grapefruit scab, melanose of grapefruit & oranges	6 Tbs. product per 1 gal. water	4-4-100	Apply two (2) treatments at the same dosage rate. Apply the first treatment in the late winter prior to spring growth. Apply the second treatment after the petals have fallen from the blossoms but before the new fruit is larger than a pea.
Tomato	Early blight, late blight, & Septoria leaf spot	6 Tbs. product per 1 gal. water	4-4-100	Begin applications when disease threatens and repeat applications at 7 to 10 day intervals using full coverage spray.
<b>TREES AND ORNAMENTALS:</b>				
Ivy	Leaf spot	6 Tbs. product per 1 gal. water	4-4-100	Apply full coverage spray. Begin applications when the infection begins and repeat application in 14 days if necessary.
Delphinium & Geranium	Leaf spot, blight	4 Tbs. product per 1 gal. water	4-4-100	Begin applications when disease infection begins and repeat treatments if necessary.
Peony	Leaf blotch & botrytis blight (gray mold)	6 Tbs. product per 1 gal. water	4-4-100	Spray before shoots are 1 ft. tall. Repeat the application at the same dosage rate in 2 weeks. If any sign of bud blast, spray again. Remove any wilted shoots by cutting below ground, place in paper bag & burn. Remove old stalks and leaves in fall and burn - Do Not Compost.
Camellia	Dieback	6 Tbs. product per 1 gal. water	4-4-100	Apply in early spring.
Dahlia, Tulip, Gladiolus, & Lily	Botrytis blight (gray mold)	6 Tbs. product per 1 gal. water	4-4-100	Apply in early spring. Repeat treatment in 7 to 10 days.
Iris & Chrysanthemum	Leaf spot & blight	8 Tbs. product per 1 gal. water	8-8-100	Apply when growth begins in the spring. Repeat as necessary to maintain control at 7 to 10 day intervals.
Hollyhock & Phlox	Anthrachnose & leaf spot	8 Tbs. product per 1 gal. water	8-8-100	Spray after periods of wet weather.
Pansy	Downy mildew	8 Tbs. product per 1 gal. water	8-8-100	Spray every 2 weeks during growing season.
Rose	Powdery mildew & black spot	8 Tbs. product per 1 gal. water	8-8-100	Begin application when disease occurs and conditions favor the development of the disease. Apply as a full coverage spray in the early spring as leaves expand. Treat at 10 to 14 day intervals. Prune out diseased and dead canes.

**APPLICATION INSTRUCTIONS CONTINUED:**

Plant	Disease	Application Rate, Tbs. /1 gal. water	Spray Concentration of Bordeaux Mixture	Remarks
Arborvitae, Cedar, Cypress & Juniper	Coryneum blight, leaf blotch, twig blight, leaf spot & cedar apple rust	6 Tbs. product per 1 gal. water	4-4-100	Apply in early spring and fall. Repeat at 2 week intervals as needed.
Pine	Tip blight & needle cast	8 Tbs. product per 1 gal. water	8-8-100	Three applications as a full coverage spray are suggested. Spray as new growth starts, as new needles emerge from the sheath, and when needles are 2/3 of mature length.
Laurel, Rhododendron & Azalea	Leaf spot, leaf blight & <i>Pseudomonas syringae</i>	4 Tbs. product per 1 gal. water	4-4-100	Apply as a full coverage spray in early spring. A second application at the post-bloom stage is recommended.
Palm	Anthrachnose, scab & leaf spot	6 Tbs. product per 1 gal. water	4-4-100	Apply when disease symptoms appear. Repeat treatments to maintain control.
Barberry	Bacterial leaf spot	8 Tbs. product per 1 gal. water	8-8-100	Apply when new leaves appear. Repeat two (2) to three (3) times at 10 day intervals.
Boxwood	Nectria canker & leaf spot	8 Tbs. product per 1 gal. water	8-8-100	Begin applications in early spring growth stages. Repeat treatments as necessary to maintain control.
Yew	Twig blight	8 Tbs. product per 1 gal. water	8-8-100	Apply in spring as growth begins.
Blue spruce & Douglas fir	Needle cast	8 Tbs. product per 1 gal. water	8-8-100	Use full coverage spray.
Sycamore, Linden, Oak, Tulip Tree, Elm, Ash, & Walnut	Anthrachnose, leaf spot & elm leaf curl	8 Tbs. product per 1 gal. water	8-8-100	Begin applications when the leaves begin to unfold in the spring to protect the plant before infection begins. Repeat in 14 to 21 days.
Maple: Red, & Sugar	<i>Pseudomonas</i> blight & anthracnose	6-7 Tbs. product per 1 gal. water	4-4-100	Apply as full coverage spray as leaves uncurl (bud break). Repeat treatment to maintain control at 14 to 21 day intervals.
	Nectria canker	8 Tbs. product per 1 gal. water	8-8-100	One (1) application in the fall (Oct.) and two (2) to three (3) applications in the spring after the young growth appears may help reduce the infection level.

7/9

**APPLICATION INSTRUCTIONS CONTINUED:**

Plant	Disease	Application Rate, Tbs. /1 gal. water	Spray Concentration of Bordeaux Mixture	Remarks
Pear, non-bearing ( <i>Pyrus communis</i> )	<i>Pseudomonas</i> blight & anthracnose	6-7 Tbs. product per 1 gal. water	4-4-100	Apply as full coverage spray as leaves uncurl (bud break). Two (2) to three (3) applications at 14 to 21 day intervals may be needed to maintain control. Dormant applications (before any growth starts in the spring) may aid in the control of <i>Pseudomonas</i> blight and anthracnose.
Plum, non-bearing ( <i>Prunus sp.</i> )	<i>Pseudomonas</i> blight & anthracnose	6-7 Tbs. product per 1 gal. water	4-4-100	Apply as full coverage spray as leaves uncurl (bud break). Repeat treatment to maintain control at 14 to 21 day intervals.
Lilac ( <i>Syringa</i> )	Powdery mildew & bacterial blight	6-7 Tbs. product per 1 gal. water	4-4-100	Begin application when disease occurs and conditions favor the development of the disease. Apply as a full coverage spray in the early spring. A second application at the post-bloom stage is recommended.
Japanese dogwood ( <i>Cornus kousa</i> ) & Flowering dogwood ( <i>Cornus florida</i> )	<i>Pseudomonas</i> blight & anthracnose	6-7 Tbs. product per 1 gal. water	4-4-100	Begin application at bud break and continue applications at 10 to 14 day intervals until dry weather. Applications during the remainder of the season may be needed if continued periods of wet weather.
Aspen ( <i>Populus</i> ) & Poplar ( <i>Populus</i> )	<i>Pseudomonas</i> blight & anthracnose	6-7 Tbs. product per 1 gal. water	4-4-100	Begin application at bud break and continue applications at 14 to 21 day intervals.
Crabapple, non-bearing ( <i>Malus sp.</i> )	<i>Pseudomonas</i> blight & anthracnose	6-7 Tbs. product per 1 gal. water	4-4-100	Apply as full coverage spray as leaves uncurl (bud break). Two (2) to three (3) applications at 14 to 21 day intervals may be needed to maintain control. Dormant applications (before any growth starts in the spring) may aid in the control of <i>Pseudomonas</i> blight and anthracnose.
Cherry, non-bearing ( <i>Prunus sp.</i> )	<i>Pseudomonas</i> blight & anthracnose	6-7 Tbs. product per 1 gal. water	4-4-100	Dormant applications (before any growth starts in the spring) may aid in the control of bacterial canker ( <i>Pseudomonas syringae</i> ).
Willow ( <i>Salix sp.</i> )	Twig blight (scab)	7 Tbs. product per 1 gal. water	4-4-100	Begin applications in the spring when new leaves are visible. Make two (2) to three (3) applications and repeat at 10 to 14 day intervals especially if wet weather occurs.

b/s



9/9

**LIMITED WARRANTY AND DISCLAIMER.**

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

