

Dow AgroSciences

Rubigan* E.C.

Fungicide

A locally systemic fungicide for the control of scab, powdery mildew and rusts of apple; scab and powdery mildew of pear; leaf spot and powdery mildew of cherry; and powdery mildew of grape.

Active Ingredient:

fenarimol: α -(2-chlorophenyl)- α -(4-chlorophenyl)-5-pyrimidinemethanol	12.0%
Inert Ingredients	88.0%

Total 100.0%

Contains petroleum distillate.

Contains 1 pound active ingredient per gallon.

EPA Reg. No. 62719-134

PRECAUTIONARY STATEMENTS**Hazards to Humans and Domestic Animals****KEEP OUT OF REACH OF CHILDREN****WARNING/AVISO**

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.)

Causes Substantial But Temporary Eye Injury • Causes Skin Irritation • Harmful If Swallowed, Inhaled Or Absorbed Through The Skin

Do not get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selections chart.

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as Barrier Laminate or Viton
- Chemical resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading

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.

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 after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Aid

If in eyes: Flush with plenty of water. Call a physician.

If swallowed: Drink promptly large quantities of milk, egg whites or gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. Get medical attention.

If on skin: Immediately wash with plenty of soap and water. Get medical attention if irritation develops.

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Environmental Hazards

This product is toxic to fish. 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 from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply when weather conditions favor runoff or drift from the target area. Do not contaminate water when disposing of equipment washwaters.

Notice: Read the entire label. Use only according to label directions. **Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" elsewhere on this label.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

DIRECTIONS FOR USE

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

Read all Directions for Use carefully before applying.

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 12 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 over short-sleeved shirt and short pants
- Chemical-resistant gloves such as Barrier Laminate or Viton
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

STORAGE AND DISPOSAL

Storage: Avoid freezing. Do not store near heat or open flame. Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

Pesticide Disposal: Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on treatment site or at an approved waste disposal facility.

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

GENERAL INFORMATION

Rubigan* E.C. fungicide is an emulsifiable concentrate formulation designed to control various foliar and fruit diseases of apple, pear, cherry and grape listed in each respective crop section. Rubigan E.C. is a locally systemic fungicide that controls susceptible fungal diseases by preventing the formation of certain sterol components and other materials necessary for their growth. Rubigan E.C. is compatible with most insecticides, miticides and fungicides commonly recommended for the crops listed.

Use Rubigan E.C. as a foliar spray to control the diseases listed in the apples, pears, cherries and grapes crop sections. **Note:** Use recommendations for Rubigan E.C. for all crops are made according to geographic area: **Eastern United States** (East of the Rocky Mountain continental divide); and **Western United States** (West of the Rocky Mountain continental divide). Follow use recommendations in the appropriate section for your area.

General Use Precautions

Do not graze cover crops treated with Rubigan or harvest forage for silage or hay. Apply Rubigan with ground application equipment only.

Do not apply Rubigan through any type of irrigation system.

Observe rate restrictions and preharvest intervals outlined for each crop.

Mixing and Application Directions

Fill the spray tank to at least one-half the required spray volume and start agitation. Add (in order) dry flowable, wettable powder, and flowable (aqueous suspension) products to the spray tank. Then add the recommended rate of Rubigan E.C. followed by other emulsifiable concentrate and solution products. Allow time for thorough mixing after adding each product. Finish filling spray tank and maintain continuous agitation in the spray tank during mixing, filling and spraying operations.

Tank Mixing

For control of each disease listed in the following tables Rubigan E.C. may be used alone or in combination (tank mix) with a protectant fungicide active against each respective disease. Use the protectant fungicides at application rates and according to their respective product labels. **Note:** Tank mix combinations of Rubigan E.C. plus a copper containing product may result in reduced effectiveness of Rubigan E.C. and are not recommended.

Use of Surfactants

When used alone tank mix Rubigan E.C. with a surfactant. Surfactants compatible with Rubigan E.C. include R-56 Spreader Sticker, Wilbur Ellis Co.; Bio-88 Spreader Activator, Kalo laboratories; Regulaid, Kalo Laboratories; Leafact 80A

Activator, Puregro Co.; Induce, Helena Chemical Co.; LI-700, Loveland Industries, Triton B-1956, Rohm and Haas, Latron B-1956, Rohm and Haas, or others where prior use has shown compatibility. Certain states require registration of surfactants. Where applicable, verify that the surfactant is registered for agricultural use in your state.

Spray Volume and Concentration

Mix the recommended dosage of Rubigan E.C. (consult appropriate crop section for your area) in sufficient water to ensure adequate coverage and apply as a concentrate or dilute spray using ground application equipment only. Attention should be given to sprayer speed and calibration, wind speed, and tree and vine foliar canopy to ensure adequate spray coverage with Rubigan E.C.

Rate Ranges and Spray Intervals

Where a rate range is provided in use directions for Rubigan E.C., use higher rates when moderate to severe infection conditions exist or are anticipated. Where a range in the spray interval is indicated (e.g., 7 to 10 days), use the shortest spray interval within the indicated spray interval range if moderate to severe infection conditions exist. Climatic conditions, varietal susceptibility, disease history and current disease status of the orchard or vineyard must be considered when choosing rates and spray schedules for Rubigan E.C. Begin applications of Rubigan E.C. according to label directions or as recommended by your state agricultural experiment station or extension service specialist.

Use and Dosage Recommendations

Apples and Pears: Disease Control Recommendations for Eastern United States

(East of the Rocky Mountain Continental Divide)

Crop Disease (Growth stage of tree) Rubigan E.C. spray mix	Rubigan E.C. ¹		Maximum spray interval (days)
	Use rate per acre (fl oz)	Use rate per 100 gal of water dilute ² (fl oz)	
Apples Scab (Green tip—cover sprays ³) <i>Rubigan E.C. & protectant</i>	8-12	3-4	7-10
Scab—Post-infection (Green tip—cover sprays ³) <i>Rubigan E.C. & protectant</i>	8-12	3-4	
1st spray	8-12	3-4	7
2nd spray	8-12	3-4	
Powdery Mildew (Tight cluster—cover sprays)	8-12	3-4	14
Rusts (Tight cluster—2nd cover spray)	8-12	3-4	7-10
Use Directions and Restrictions			
Scab —When Rubigan E.C. is used to control scab, at least two consecutive applications should be applied.			
Scab—Post Infection Spray Schedule: Apply “1st spray” within 96 hours from the beginning of the targeted infection period. Apply the “2nd spray” within 7 days of the “1st spray”. Growers who do not have access to accurate on-farm scab infection period data cannot make effective use of this spray schedule.			
Tank Mixing (Rubigan E.C. and Protectant): When tank-mixed with a protectant fungicide use recommended rates of the protectant fungicide.			
Restrictions: Do not apply more than 12 fl oz of Rubigan E.C. per acre per application and more than 84 fl oz per acre per season. Do not apply within 30 days of harvest.			
Pears Scab (Petal fall—cover sprays) <i>Rubigan E.C. & protectant</i>	8-12	3-4	7-10
Powdery Mildew and Rusts (Petal fall—cover sprays)	8-12	3-4	14
Use Directions and Restrictions			
Application Timing: After petal fall (see Restrictions).			
Tank Mixing (Rubigan E.C. and Protectant): When tank-mixed with a protectant fungicide use recommended rates of the protectant fungicide.			
Restrictions: Do not apply to pears until after petal fall. Such application(s) will only control scab, powdery mildew and rust infections that occur after petal fall. Do not apply more than 12 fl oz of Rubigan E.C. per acre per application and more than 84 fl oz per acre per season. Do not apply within 30 days of harvest.			

- When using “tree row volume” calculations, do not apply less than 6 fl oz of Rubigan E.C. per acre. Use a surfactant when Rubigan E.C. is applied alone. See “Use of Surfactants” section in the General Information section.
- Dilute sprays are sprayed until the point of runoff. Gallonage of dilute sprays will vary depending on tree size, density of canopy and stage of growth of the trees and tree spacing in the orchard.
- It is recommended that Rubigan E.C. be tank mixed with a protectant fungicide for purposes of apple scab resistance management. Rubigan E.C., however, may be applied alone from

green tip to tight cluster. During this period, apply Rubigan E.C. at 8-12 fl oz/acre or 3-4 fl oz per 100 gallons of water on a 7-day spray interval. If the last planned spray application of Rubigan E.C. occurs within the green tip to tight cluster window, Rubigan E.C. must be tank mixed with a protectant fungicide.

Cherries: Disease Control Recommendations for Eastern United States

(East of the Rocky Mountain Continental Divide)

Crop Disease Growth stage	Rubigan E.C. ¹		Maximum spray interval (days)
	Use rate per acre (fl oz)	Use rate per 100 gal of water dilute ² (fl oz)	
Cherries Leaf spot and Powdery Mildew (Petal fall—Post-harvest)	6-12	3-4	7-10
Use Directions and Restrictions			
Application Timing: Begin applications at “petal fall” and continue until “harvest.” One or two “post-harvest” applications may be made within 45 days after “harvest.” If an “alternate row” spray program is used, do not exceed a 7 day spray interval.			
Restrictions: Do not apply more than 12 fl oz of Rubigan E.C. per acre per application and more than 36 fl oz per acre prior to “harvest.” Rubigan E.C. may be applied up to and after “harvest.”			

- Use a surfactant when Rubigan E.C. is applied alone. See “Use of Surfactants” section in the General Information section.

- Dilute sprays are sprayed until the point of runoff. Gallonage of dilute sprays will vary depending on tree size, density of canopy and stage of growth of the trees and tree spacing in the orchard.

Grapes: Disease Control Recommendations for Eastern United States

(East of the Rocky Mountain Continental Divide)

Crop Disease Growth stage	Rubigan E.C. ¹ use rate per acre (fl oz)	Maximum spray interval (days)
Grapes Powdery Mildew		
Pre-bloom sprays	2-3	14-18
Post-bloom	4-5	14-18
Summer sprays	5-6	14-18
Use Directions and Restrictions		
Application Timing: Rubigan E.C. may be applied alone or in tank mix combinations with recommended rates of a protectant fungicide, insecticide and/or miticide. Begin applications as recommended by your State Extension Specialist or Agricultural Experiment Station, or Certified Pest Control Advisor. Use rates per acre as specified by the crop phenology.		
Restrictions: Do not apply more than 6 fl oz of Rubigan E.C. per acre per application and 19 fl oz per acre per season. Preharvest Interval: Do not apply within 30 days of harvest.		

- Use a surfactant when Rubigan E.C. is applied alone. See “Use of Surfactants” section in the General Information section.

Apples: Disease Control Recommendations for Western United States

(West of the Rocky Mountain Continental Divide)

Crop Disease (Spray Schedule)	Rubigan E.C. ¹		Maximum spray interval (days)
	Use rate per acre (fl oz)	Use rate per 100 gal of water dilute ² (fl oz)	
Apples Scab (Regular)	8-12	2-3	7-10
(Post-Infection)			
1st spray	8-12	2-3	—
2nd spray	8-12	2-3	7
Powdery Mildew	8-12	2-3	14

Use Directions and Restrictions

Scab—Application Timing: Begin applications at “green tip” or when environmental conditions become favorable for primary scab development.

Scab—Post Infection Spray Schedule: Apply “1st spray” within 96 hours from the beginning of the first “primary scab” infection period. Apply the “2nd spray” within 7 days if a scab infection period has occurred within 3 days after the “1st spray”.

If not, apply within 96 hours after the beginning of the next scab infection period. Growers who do not have access to accurate on-farm scab infection period data cannot make effective use of this spray schedule.

Powdery Mildew: Apply Rubigan E.C. at the following stages of growth: “green tip”, “pre-pink” or “pink”, “petal fall”, and “first cover”.

Crop Disease (Spray Schedule)	Rubigan E.C. ¹		Maximum spray interval (days)
	Use rate per acre (fl oz)	Use rate per 100 gal of water dilute ² (fl oz)	
Restrictions: Do not apply more than 12 fl oz of Rubigan E.C. per acre per application or more than 84 fl oz per acre per season. Preharvest Interval: Do not apply within 30 days of harvest.			

- When using "tree row volume" calculations, do not apply less than 6 fl oz of Rubigan E.C. per acre. When Rubigan E.C. is used for "Post-Infection" control of scab do not apply less than 8 fl oz per acre.
- Dilute sprays are sprayed until the point of runoff. Gallonage of dilute sprays will vary depending on tree size, density of canopy and stage of growth of the trees and tree spacing in the orchard.

Pears: Disease Control Recommendations for Western United States

(West of the Rocky Mountain Continental Divide)

Crop Disease (Spray Schedule)	Rubigan E.C. ¹		Maximum spray interval (days)
	Use rate per acre (fl oz)	Use rate per 100 gal of water dilute ² (fl oz)	
Pears			
Scab (Petal fall—cover sprays)	8-12	2-3	7-10
Powdery Mildew (Petal fall—cover sprays)	8-12	2-3	14
Use Directions and Restrictions Application Timing: Rubigan E.C. may be applied alone or in tank mix combination with recommended rates of a protectant fungicide. Scab and Powdery Mildew: Do not apply to pears until after petal fall. Such application(s) of Rubigan E.C. will control only scab or powdery mildew resulting from infection periods occurring after petal fall. Restrictions: Do not apply more than 12 fl oz of Rubigan E.C. per acre per application or more than 84 fl oz per acre per season. Preharvest Interval: Do not apply within 30 days of harvest.			

- When using "tree row volume" calculations, do not apply less than 6 fl oz of Rubigan E.C. per acre. When Rubigan E.C. is used for "Post-Infection" control of scab do not apply less than 8 fl oz per acre.
- Dilute sprays are sprayed until the point of runoff. Gallonage of dilute sprays will vary depending on tree size, density of canopy and stage of growth of the trees and tree spacing in the orchard.

Cherries: Disease Control Recommendations for Western United States

(West of the Rocky Mountain Continental Divide)

Crop Disease (Spray Schedule)	Rubigan E.C.		Maximum spray interval (days)
	Use rate per acre (fl oz)	Use rate per 100 gal of water dilute ¹ (fl oz)	
Cherries			
Leaf Spot (late bloom—harvest)	6-12	2-3	14-21
Powdery Mildew (late bloom—harvest)			
Use Directions and Restrictions Application Timing: Rubigan E.C. may be applied alone or in tank mix combination with recommended rates of a protectant fungicide. Begin applications at "late bloom" to "petal fall" and continue until "harvest". Restrictions: Do not apply more than 12 fl oz of Rubigan E.C. per acre per application or more than 48 fl oz per acre prior to harvest. Rubigan E.C. may be applied up to "harvest".			

- Dilute sprays are sprayed until point of runoff. Gallonage of dilute sprays will vary depending on tree size, density of canopy and stage of growth of the trees and tree spacing in the orchard.

Grapes: Disease Control Recommendations for Western United States

(West of the Rocky Mountain Continental Divide)

Crop Disease (Spray Schedule)	Rubigan E.C. ¹ Use Rate Per Acre (fl oz)	Maximum Spray Interval (days)
Grapes		
Powdery Mildew (Pre-bloom)		
2 weeks Pre-bloom	2-3	14-18
Full-bloom	4	14-18
1st Post-bloom	6	14-18
2nd Post-bloom	6	14-18
(Prebloom/Extended)		
2 weeks Pre-bloom	2	14-18
Full-bloom	3	14-18
1st Post-bloom	4	14-18
2nd Post-bloom	5	14-18
3rd Post-bloom	5	14-18
(Full-bloom)		
Full-bloom	3	14-18
1st Post-bloom	4	14-18
2nd Post-bloom	6	14-18
3rd Post-bloom	6	14-18

Use Directions, Precautions and Restrictions

Application Timing: Rubigan E.C. may be applied alone or in tank mix combination with recommended rates of a protectant fungicide. Depending on the length of time from "full bloom" to "veraison", amount of foliar canopy and/or the Rubigan E.C. spray interval, choose one of the three spray schedules.
Use sulfur on an appropriate schedule to maintain "mildew free" foliage prior to the initial Rubigan E.C. application.

Precautions:

Use of Rubigan E.C. at higher than recommended rates during the "pre-bloom" stage of growth may result in slight foliar effects consisting of leaf cupping and/or darker green leaf color, however, these effects do not affect fruit yield or quality.

Restrictions:

Do not apply more than 6 fl oz of Rubigan E.C. per acre per application or more than 19 fl oz per acre per season.

Preharvest Interval: Do not apply within 30 days of harvest.

- Use a surfactant when Rubigan E.C. is applied alone. See "Use of Surfactants" section in the General Information section.

WARRANTY DISCLAIMER

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by Buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- Refund of purchase price paid by buyer or user for product bought, or
- Replacement of amount of product used

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

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

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