UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PM 21 62719-134 PO 14

MAR 4 1992

Mr. Craig Blewett DowElanco Quad IV, 9002 Purdue Rd. Indianapolis, IN 46258-1189

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Dear Mr. Blewett:

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Subject: Amended Labeling Rubigan E.C. EPA Registration No. 62719-134 Your Submission Dated December 10, 1991

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable, provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

a. On the container label, the child hazard warning and signal word must be moved to precede the precautionary statements. It is suggested that the Spanish language precaution also be placed above the precautionary statements section.

b. Under precautionary statements, add the signal word following "Hazards to Humans and Domestic Animals."

c. Under Environmental Hazards on the label and in the booklet, change the second sentence to "Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark."

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

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A stamped copy of the label is enclosed for your records.

Sincerely yours,

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Susan T. Lewis Product Manager (21) Fungicide-Herbicide Branch Registration Division (H7505C)

Enclosure

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(Container Label)

(logo) DowElanco

Rubigan\* E.C.

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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:

Contains petrol-um distillate.

Contains 1 pound active ingredient per gallon.

## Precautionary Statements

#### Hazards to Humans and Domestic Animals Keep Out of Reach of Children WARNING

## **AVISO**

**Precaucion al usuario:** Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

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. Wear goggies, lace shield or safety glasses, and protective clothing such as coveralis, a long-sleeved shirt and impermeable gloves (i.e. butyl rubber) when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Do not apply this product in such a manner as to directly or through dritt expose workers or other persons. The area being treated must be vacated by unprotected workers. See attached label booklet for additional farm worker safety requirements under the heading "Note to User - Reentry".

#### First Aid

If in eyes: Flush with planty 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 or wetlands. 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.

Refer to label booklet for additional precautionary information and Directions for Use including Storage and Disposal.

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and Limitation of Remedies" in attached label booklet.

In case of emergency endangering life or property involving this product, call collect (517) 636-4400.

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

EPA Reg. No. 62719-134 E.P.A. Est. No. 1471-IN-XX

\*Trademark of DowElanco

Dowelanco Indianapolis, Indiana 46268-1189, U.S.A.

# Fungicide

Net Contents - 1 Quart

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(Label Booklet)

(logo) DowElanco

# Rubigan<sup>\*</sup> E.C.

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%
isticition with chorophony with chorophony o pyrinkemetholic method	12.070
Inert Ingredients	38.0%

Contains petroleum distillate.

Contains 1 pound active ingredient per gallon.

## Keep Out of Reach of Children WARNING

## AVISO

Precaucion al usuarlo: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

Refer to inside of booklet for precautionary information and Directions for Use including Storage and Disposal

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and Limitation of Remedies" in attached label booklet.

In case of emergency endangering life or property involving this product, call collect (517) 636-4400.

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

EPA Reg. No. 62719-134 E.P.A. Est. No. 1471-IN-XX

\*Trademark of DowFlanco

DowElanco Indianapolis, Indiana 46268-1189, U.S.A.

## Fungicide

# Net Contents - 1 Quart

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### Precautionary Statements

Hazards to Humans and Domestic Animals WARNING

# AVISO

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Precaucion al usuario: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

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. Wear goggies, face shield or safety glasses, and protective clothing such as coveralls, a long-sleeved shirt and impermeable gloves (i.e. butyl rubber) when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected workers. See attached label booklet for additional farm worker safety requirements under the heading "Note to User - Reentry".

#### **First Ald**

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

It 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 or wetlands. 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.

#### **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.

#### Note to User - Reentry

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your state Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area cr in an area about to be treated with this product. (Indicate specific oral warnings which inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to be taken in case of accidental exposure.) When oral warnings are given, warnings shall be given in a language customarily understood by workers. Written warnings must include the following information:

WARNING. Area treated with Rubigan E. C. on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of eye contact, immediately flush with plenty of water and call a physician. In case of skin contact, immediately wash with plenty of soap and water. Get medical attention if irritation develops. If inhaled and discomfort occurs, move to fresh air. Get medical attention if breathing difficulty occurs.



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### 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 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 is compatible with most insecticides, miticides and fungicides commonly recommended for the crops listed.

#### **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 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 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.

### Use and Dosage Rec nmendations

Use Rubigan hs a foliar spray to control the diseases listed in the apple, pear, cherry and grape crop sections. Note: Rubigan use recommendations 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.

#### Spray Volume and Concentration

Mix the recommended dosage of Rubigan (consult appropriate crop section for your area) in sufficient water to ensure adequate coverage and apply as a concentrate (less than 200 gallons per acre) or dilute (greater than 200 gallons per acre) spray using ground application equipment only. The final Rubigan tank mixture must have a minimum concentration of 3 II. oz. (2 II. oz. for grapes) of Rubigan per 100 gallons of water. Do not exceed the maximum use rate of Rubigan per acre per application for the respective crop. Attention should be given to sprayer speed and calibration, wind speed, and tree and vine foliar canopy to ensure adequate spray coverage with Rubigan.

#### **Rate Ranges and Spray Intervals**

Where a rate range is provided in use directions for Rubigan, 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. Begin applications of Rubigan according to label directions or as recommended by your state agricultural experiment station or extension service specialist.

#### Tank Mixing

For control of each disease listed in the following tables Rubigan 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 recommended on their respective product labels.

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Disease Control Recommendations for Rubigan: Eastern United States (East of the Rocky Mountain Continental Divide).					
Crop Disesse (Spray Schedule)	Rubigan <sup>1</sup> Use Rate Per Acre (fi oz)	Maximum Spray Interval (days)	Use Directions	Use Restrictions	
Apples and Pears Scab (Regular)	8 - 12 (alone)	7	Begin applications at "green tip" or when environmental conditions become favorable for primary	Do not apply more than 12 fl oz of Rubigan per acre per application or more than 84 fl oz per acre per season.	
(Extended <sup>2</sup> )	8 - 12 (tank mixed)	7 - 10	scab development and continue through the "second cover" spray. For "extended" spray schedule, tank-mix with recommended rates of a protectant fungicide. Prior to switching from the "regular" spray schedule to a protectant fungicide (only) schedule, apply Rubigan in tank-mix combination with recommended rates of a protectant fungicide.	Do not apply within 30 days of harvest.	
(Post-Infection <sup>3</sup> ) 1st spray	8 - 12	-	Apply "1st spray" within 96 hours from the beginning of the first "primary scab" infection period.		
2nd spray	8 - 12	7	Apply the "second spray" within 7 days of the "first spray".		
Powdery Mildew	8 - 12	14	Begin application at "tight cluster" and continue through the "cover sprays".		
Rusta	8 - 12	7 - 10	Begin applications at "pink" and continue through the "second cover" spray.		
Cherries Leal Spot Powdery Mildew	6	7 - 10	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.	Do not apply more than 6 fl oz of Rubigan per acre per application or more than 36 fl oz per acre prior to harvest. Rubigan may be applied up to and after "harvest".	
Grapes Powdery Mildew (Schedule) Pre-bloom Post-bloom 1st Summer spray 2nd Summer spray	2-3 4-5 5-6 5-6	14 - 18 14 - 18 14 - 18 14 - 18 14 - 18	Begin applications at 12-18 inches of shoot growth,	Do (int apply more than 6 fl oz of Rubigan per acre per application or more thar. 19 fl oz per acre per season. Do inot apply within 30 days of harvest.	

<sup>1</sup> Rubigan may be applied alone or in tank-mix combination with recommended rates of a protectant fungicide, insecticide and/or miticide. When used alone tank-mix Rubigan with a surfactant, e.g.: R-56 Spreader Activator, Wilbur Ellis Co.; Bio-88 Spreader Activator, Kalo Laboratories; Regulaid, Kalo Laboratories; Leafact 80A Activator, Puregro Co.; Induce, Helena Chemical Co; and LI-700, Loveland Industries.

<sup>2</sup> When applied to dwarf or semi-dwarf trees using "tree row volume" calculations, do not apply less than 6 oz of Rubigan per acre in tank mix combination with recommended rates of a protectant fungicide.

<sup>3</sup> Growers who do not have access to accurate on-farm scab infection period data cannot make effective use of the "post\_infection" spray schedule.

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Crop Disease (Spray Schedule)	Rubigan <sup>1</sup> Use Rate Per Acre (fl oz)	Maximum Spray Interval (days)	Use Directions	Use Restrictions	
Apples and Pears Scab (Regular)	8 - 12 (alone)	7 - 10	Begin applications at "green tip" or when environmental conditions become favorable for primary scab development.		
(Post-Infection <sup>2</sup> ) 1st spray 2nd spray	8 - 12 8 - 12	-	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.		
Powdery Mildew	8 - 12	14	Apply Rubigan at the following stages of growth; "green tip", "pre- pink" or "pink", "petal fall", and "first cover".		
Cherries Leaf Spot Powdery Mildew	6 - 12	14 - 21	Begin applications at "late bloom" to "petal fall" and continue until "harvest".	Do not apply more than 12 fl oz of Rubigan per acre per application or more than 48 fl oz per acre prior to harvest. Rubigan may be applied up to "harvest".	
Grapes Powdery Mildew (Prebloom) 2 weeks Pre-bloom Full-bloom 1st Post-bloom 2nd Post-bloom (Prebloom/Extended) 2 weeks Pre-bloom 1st Post-bloom 2nd Post-bloom 3rd Post-bloom (Full-bloom) Full-bloom 1st Post-bloom 1st Post-bloom	2-3 4 6 2 3 4 5 5 3 4 6	14 - 18 14 - 18	Depending on the length of time from "full bloom" to "veraison", amount of foliar canopy and/or the Rubigan 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 application. Use of Rubigan at higher than recommended rates during the "prebloom" 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	Do not apply more than t fl oz of Rubigan per acre per application or more than 19 fl oz per acre pe season. Do not apply within 30 days of harvest.	

Rubigan may be applied alone or in tank-mix combination with recommended rates of a projectant fungicide.
Growers who do not have access to accurate on-farm scab infection period data cannot make

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effective use of the "post infection" spray schedule.

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#### Warranty Disclaimer

DowElanco 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. DOWELANCO 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 DowElanco 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 DowElanco's election, one of the following:

(1) Refund of purchase price paid by buyer or user for product bought, or

(2) Replacement of amount of product used.

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