

10163-275

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Julie M. Butcher
Senior Registration Specialist
Gowan Company
P.O Box 5569
Yuma, AZ 85366

JAN 08 2010

Subject: Rubigan A.S.Fungicide
EPA Registration Number 10163-275
Your Label amendment dated November 10, 2009- New use on hops
Decision Number 425494

Dear Ms. Butcher:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable provided the following changes are made:

1. On page 1, in the first aid table, delete the word "FUNGICIDE".
2. On page 3, revise the heading "USE AND DOSAGE RECOMMENDATIONS" to "USE AND DOSAGE DIRECTIONS".
3. On page 3 in the use table for Apples (Scab Extended Regular Schedule for Prevention), revise the first and second sentences to read, "Rubigan A.S. may be applied in tank-mix combination with a protectant fungicide at its labeled use rate on an extended regular schedule to control apple scab. Start application at green tip and continue at intervals not to exceed 10 days."
4. On page 4 in the use table for Apples (Scab Extended Regular Schedule), revise the first and second sentences to read, "Rubigan A.S. may be applied in tank-mix combination with a protectant fungicide at its labeled use rate. Start application at green tip and continue at intervals not to exceed 10 days..."
5. On page 4 in the use table for Apples (Powdery Mildew Schedule), revise the first sentence to read, "For the control of powdery mildew of apple, apply Rubigan A.S. on the following schedule..."

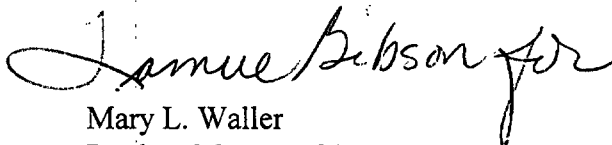
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Rubigan A.S Fungicide
EPA Registration Number 10163-275
Decision Number 425494

6. On page 5 in the use table for Pears (Extended Regular Schedule for Prevention), delete the word "recommended" in the first sentence and replace it with the word "labeled".
7. On page 6, revise the heading "USE DIRECTIONS AND RECOMMENDATIONS" to "USE DIRECTIONS AND RESTRICTIONS".
8. On page 6 in the use table for Pears (Powdery Mildew), revise the first sentence to read, "For the control of powdery mildew, apply Rubigan A.S. on the following schedule..."

One copy of the label stamped "Accepted with comments" is enclosed for your records. Please submit one copy of the final printed label that incorporates the required changes before the product is released for shipment. If you have any questions, please contact Tamue L. Gibson by phone at (703) 305-9096 or via email at gibson.tamue@epa.gov

Sincerely,



Mary L. Waller
Product Manager 21
Fungicide Branch
Registration Division (7505P)

Enclosure

JAN 08 2010

Rubigan® A.S.

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 10163-275

A locally systemic fungicide for the control of scab, powdery mildew and rusts on apples; scab and powdery mildew on pears; scab and powdery mildew on pecans and powdery mildew on grapes and hops.

ACTIVE INGREDIENT	% By Wt.
Fenarimol: a-(2-chlorophenyl)-a-(4-chlorophenyl)-5-pyrimidinemethanol	11.6%
OTHER INGREDIENTS	88.4%
	TOTAL 100.0%

Contains 1 pound active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

FIRST AID FUNGICIDE	
If in eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious or convulsing person.
If inhaled	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes eye irritation. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing spray mist and contact with skin, eyes or clothing.

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 C on an EPA chemical resistance category selections chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Lamine, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Polyvinyl Chloride (PVC) or Viton
- Shoes plus socks

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.

NET CONTENTS _____ GALLON

EPA Reg. No. 10163-275
EPA Est. No.



Produced For:
Gowan Company
P.O. Box 5569
Yuma, Arizona 85366-5569

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.

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 wash waters or rinsate.

Fenarimol has the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

This product may contaminate surface water due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water.

This product is classified as having high potential for runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff of rain water. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

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 workers 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 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protections Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Polyvinyl Chloride (PVC), or Viton
- Shoes plus socks

GENERAL INFORMATION

Rubigan A.S. fungicide is designed to control various foliar and fruit diseases of apples, pears, grapes, pecans and hops listed in each respective crop section. Rubigan A.S. controls susceptible fungal diseases by preventing the formation of certain sterol components and other materials necessary for their growth. Rubigan A.S. is absorbed into the plant foliage and is not easily washed off by rain or overhead irrigation. Rubigan A.S. is compatible with most insecticides, miticides and fungicides commonly recommended for the crops listed.

GENERAL USE RESTRICTIONS

- Do not graze cover crops treated with Rubigan A.S. or harvest forage for silage or hay.
- Do not apply more than 84 fl. ozs. of Rubigan A.S. per acre per season on apple, pear and pecan; or 21 fl. ozs. per acre per season on grapes.
- Do not apply Rubigan A.S. through any type of irrigation system.
- Observe rate restrictions and preharvest intervals outlined for each crop.
- Apply Rubigan A.S. with ground application equipment only.

MIXING AND APPLICATION DIRECTIONS

Add Rubigan A.S. to at least a one-half (1/2) full spray tank and continually agitate during the completion of filling and spraying operations. When tank mixed with other products, dry flowables should be added first to a half-full spray tank and then add the required amount of Rubigan A.S. The addition of subsequent formulations should be in the following order. Aqueous suspensions or liquid flowables should be added after Rubigan A.S., followed by wettable powders and then emulsifiable concentrates. Continually agitate during the completion of filling and spraying operations. This product must not be tank mixed with products containing label prohibitions against tank mixing. No label dosage rate may be exceeded and the most restrictive label limitations and precautions must be adhered to.

USE AND DOSAGE DIRECTIONS

**Apples: Disease Control Rates for Eastern United States (East of the Rocky Mountains/Continental Divide)
Rubigan A.S.**

CROP AND DISEASE	USE DIRECTIONS AND RESTRICTIONS
<p>Apples Scab (Regular Schedule for Prevention)</p>	<p>Apply Rubigan A.S. alone starting at green tip. Continue applications on a 7-day schedule. Use Rates: Apply Rubigan A.S. at 6 to 12 fl. ozs. per acre when used alone on a regular 7 day schedule. Under severe scab infection conditions, use the higher end of the Rubigan A.S. rate range when used alone. Do not exceed 12 fl. ozs. per acre per application. Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. alone or in tank-mix combination at the rate of 3 or more fl. ozs. Per 100 gallons of water in a uniform spray applied to run-off with conventional ground spray equipment. Concentrate Spray (less than 200 gallons per acre): Apply Rubigan A.S. at 6 to 12 fl. ozs. per acre.</p>
<p>Apples Scab (Extended Regular Schedule for Prevention)</p>	<p>Rubigan A.S. may be applied in tank-mix combination with a protectant fungicide and its recommended use rate on an extended regular schedule to control apple scab. Application should start at green tip and continue at intervals not to exceed 10 days. Use Rates – Rubigan A.S. and Protectant Fungicide: Under light scab infection conditions, use Rubigan A.S. at 6 or more fl. ozs. per acre in tank-mix combination with protectant fungicide. When moderate to severe scab infection conditions occur and growth of new tissue is rapid, use 6 or more fl. ozs. per acre and shorter spray intervals, i.e., 7 days when used in tank-mix combination with protectant fungicides. Do not exceed 12 fl. ozs. per acre per application. Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. alone or in tank-mix combination at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to run-off with conventional ground spray equipment. Concentrate Spray (less than 200 gallons per acre): Apply Rubigan A.S. at 6 to 12 fl. ozs. per acre when used in combination with another protectant fungicide.</p>
<p>Apples Scab (Post-Infection Schedule)</p>	<p>Rubigan A.S. may be applied on a post-infection schedule. Application should be made within 96 hours (4 days) from the beginning of the first primary scab infection period and followed by a second application 7 days later. <u>Growers who do not have access to accurate on farm apple scab infection period data should not use the post-infection schedule.</u> Use Rates: Apply Rubigan A.S. at 9 to 12 fl. ozs. per acre within 96 hours from the beginning of apple scab infection period, and follow with a second application at 6 to 9 fl. ozs. per acre 7 days later. When severe scab infection periods occur, use the higher end of the Rubigan A.S. rate range for each application. Do not exceed 12 fl. ozs. per acre per application. Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S., alone or in tank-mix combination at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to run-off with conventional ground spray equipment. Concentrate Spray (less than 200 gallons per acre): Apply Rubigan A.S. at 6 to 12 ozs. per acre.</p>
<p>Apples Powdery Mildew and/or Rust Schedule</p>	<p>Use Rates: For the control of powdery mildew or rusts, use Rubigan A.S. alone or in combination at 6 to 9 fl. ozs. per acre for light to moderate infection levels or 9 to 12 fl. ozs. per acre for severe infection levels starting at green tip. Do not allow the spray interval to exceed 14 days. Do not exceed 12 fl. ozs. per acre per application. Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. alone or in tank-mix combination at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to run-off with conventional ground spray equipment. Concentrate Spray (less than 200 gallons per acre): Apply Rubigan A.S. at 6 to 12 fl. ozs. per acre.</p>

1. Do not apply within 30 days of harvest.
2. Do not apply more than 48 fl. ozs. of Rubigan A.S. per acre per season on apples.
3. Climatic conditions, varietal susceptibility and disease history of the orchard should be considered when choosing a use rate and spray schedule program for Rubigan A.S.
4. Apply Rubigan A.S. on a regular schedule, an extended regular combination schedule, or a post-infection schedule or a powdery mildew and/or rust schedule. Whichever schedule is used, the Rubigan A.S. application prior to switching to a program utilizing protectant fungicides alone should include a protectant fungicide (a nonsterol inhibiting fungicide) in tank-mix combination with Rubigan A.S.
5. Use ground application equipment only.
6. A minimum of 3 fl. ozs./100 gals. dilute should be used for applications based on tree row volume calculations. Due to the variability of spraying conditions, spray coverage and drying times, no less than 6 fl. ozs. of Rubigan A.S. in combination with a protectant fungicide should be used per acre in tree row volume sprays.
7. Do not apply Rubigan A.S. more than 4 times per year.

Apples: Disease Control Rates for Western United States (West of the Rocky Mountains/Continental Divide)
Rubigan A.S.

CROP AND DISEASE	USE DIRECTIONS AND RESTRICTIONS
Apples Scab (Regular Schedule)	<p>For the control of apple scab, apply Rubigan A.S. starting at green tip. Continue applications on a 7 to 10 day schedule. Use the higher rates and shorter intervals when disease conditions are severe.</p> <p>Do not apply less than 9 fl. ozs. or more than 12 fl. ozs. of Rubigan A.S. per acre. Do not exceed 12 fl. ozs. per acre per application.</p> <p>Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to the point of run-off with conventional ground spray equipment.</p> <p>Concentrate Spray (less than 200 gallons per acre), use ground application equipment only. Apply Rubigan A.S. at 9 to 12 fl. ozs. per acre.</p>
Apples Scab (Extended Regular Schedule)	<p>Rubigan A.S. may be applied in tank-mix combination with a protectant fungicide at its recommended use rate. Application should start at green tip and continue at intervals not to exceed 10 days when using the extended regular schedule to control apple scab. Use the higher combination rates and shorter spray intervals, i.e., 7 days, when disease conditions are severe.</p> <p>Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to the point of run-off with conventional ground spray equipment.</p> <p>Concentrate Spray (less than 200 gallons per acre), use ground application equipment only. Apply Rubigan A.S. at 9 to 12 fl. ozs. per acre.</p>
Apples Scab (Post-Infection Schedule)	<p>Rubigan A.S. may be applied on a post-infection schedule. The first application should be made within 96 hours (4 days) from the beginning of the first scab infection period. <u>Growers who do not have access to accurate apple scab infection period data should not use the post-infection schedule.</u></p> <p>Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to the point of run-off with conventional ground spray equipment.</p> <p>Concentrate Spray (less than 200 gallons per acre), use ground application equipment only. Apply Rubigan A.S. at 9 to 12 fl. ozs. per acre.</p> <p>Post-infection applications of Rubigan A.S. should be based on the following procedures explained in paragraphs 1 to 3 below, which determine the proper timing for Rubigan A.S. applications. Paragraph 1 will always determine the proper timing of the first Rubigan A.S. application. To determine the proper timing of subsequent applications, the situations explained in paragraphs 2 and 3 must be considered.</p> <ol style="list-style-type: none"> 1. The first Rubigan A.S. application should be made within 96 hours (4 days) from the beginning of the first primary apple scab infection period. 2. If one or more scab infection periods occur within 3 days after a Rubigan A.S. application, then Rubigan A.S. should be applied within 7 days of the previous Rubigan A.S. application. Do not allow the spray interval to exceed 7 days in this situation. 3. If no apple scab infection period occurs within 3 days after a Rubigan A.S. application, then apply Rubigan A.S. within 96 hours (4 days) after the beginning of the next scab infection period.
Apples Powdery Mildew Schedule	<p>For the control of powdery mildew of apple, Rubigan A.S. should be applied on the following schedule as indicated by the stage of crop development.</p> <ol style="list-style-type: none"> 1. Green-tip 2. Pre-pink/pink 3. Petal fall 4. First Cover <p>For the control of powdery mildew, do not exceed 14 days between Rubigan A.S. applications.</p> <p>Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to the point of run-off with conventional ground spray equipment.</p> <p>Concentrate Spray (less than 200 gallons per acre), use ground application equipment only. Apply Rubigan A.S. at 9 to 12 fl. ozs. per acre.</p>

1. Do not apply within 30 days of harvest.
2. Do not apply more than 48 fl. ozs. of Rubigan A.S. per acre per season on apples.
3. Climatic conditions, varietal susceptibility and disease history of the orchard should be considered when choosing a use rate and spray schedule program for Rubigan A.S.
4. Apply Rubigan A.S. on a regular schedule, an extended regular combination schedule, or a post-infection schedule or a powdery mildew and/or rust schedule. Whichever schedule is used, the Rubigan A.S. application prior to switching to a program utilizing protectant fungicides alone should include a protectant fungicide (a nonsterol inhibiting fungicide) in tank-mix combination with Rubigan A.S.
5. Use ground application equipment only.

6. A minimum of 3 fl. ozs./100 gals. dilute should be used for applications based on tree row volume calculations. Due to the variability of spraying conditions, spray coverage and drying times, no less than 6 fl. oz of Rubigan A.S. in combination with a protectant fungicide should be used per acre in tree row volume sprays.
7. Do not apply Rubigan A.S. more than 4 times per year.

**Pears: Disease Control Rates for Eastern United States (East of the Rocky Mountains/Continental Divide)
Rubigan A.S.**

CROP AND DISEASE	USE DIRECTIONS AND RESTRICTIONS
Pears Scab (Regular Schedule for Prevention)	Apply Rubigan A.S. alone starting at green tip. Continue applications on a 7-day schedule. Use Rates: Apply Rubigan A.S. at 6 to 12 fl. ozs. per acre when used alone on a regular 7 day schedule. Under severe scab infection conditions, use the higher end of the Rubigan A.S. rate range when used alone. Do not exceed 12 fl. ozs. per acre per application. Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. alone or in tank-mix combination at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to run-off with conventional ground spray equipment. Concentrate Spray (less than 200 gallons per acre): Apply Rubigan A.S. at 6 to 12 fl. ozs. per acre.
Pears Scab (Extended Regular Schedule for Prevention)	Rubigan A.S. may be applied in tank-mix combination with a protectant fungicide at its recommended use rate on an extended regular schedule to control pear scab. Application should start at green tip and be continued at intervals not to exceed 10 days. Use Rates – Rubigan A.S. and Protectant Fungicide: Under light scab infection conditions, use Rubigan A.S. at 4 or more fl. ozs. per acre in tank-mix combination with protectant fungicide. When moderate to severe scab infection conditions occur and growth of new tissue is rapid, use 6 or more fl. ozs. per acre and shorter spray intervals, i.e., 7 days, when used in tank-mix combination with protectant fungicides. Do not exceed 12 fl. ozs. per acre per application. Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. alone or in tank-mix combination at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to run-off with conventional ground spray equipment. Concentrate Spray (less than 200 gallons per acre): Apply Rubigan A.S. at 4 to 12 fl. ozs. per acre when used in combination with another protectant fungicide.
Pears Scab (Post-Infection Schedule)	Rubigan A.S. may be applied on a post-infection schedule. Make applications within 96 hours (4 days) from the beginning of the first primary scab infection period and followed by a second application 7 days later. <u>Growers who do not have access to accurate on farm pear scab infection period data should not use the post-infection schedule.</u> Use Rates: Apply Rubigan A.S. at 9 to 12 fl. ozs. per acre within 96 hours from the beginning of pear scab infection period, and follow with a second application at 6 to 9 fl. ozs. per acre 7 days later. When severe scab infection periods occur, use the higher end of the Rubigan A.S. rate range for each application. Do not exceed 12 fl. ozs. per acre per application. Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. alone or in tank-mix combination at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to run-off with conventional ground spray equipment. Concentrate Spray (less than 200 gallons per acre): Apply Rubigan A.S. at 6 to 12 fl. ozs. per acre.
Pears Powdery Mildew Schedule	Use Rates: For the control of powdery mildew, use Rubigan A.S. alone or in combination at 6 to 9 fl. ozs. per acre for light to moderate infection levels or 9 to 12 fl. ozs. per acre for severe infection levels starting at green tip. Do not allow the spray interval to exceed 14 days. Do not exceed 12 fl. ozs. per acre per application. Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. alone or in tank-mix combination at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to run-off with conventional ground spray equipment. Concentrate Spray: (less than 200 gallons per acre): Apply Rubigan A.S. at 6 to 12 fl. ozs. per acre.

1. Do not apply Rubigan A.S. within 30 days of harvest.
2. Climatic conditions, varietal susceptibility and disease history of the orchard should be considered when choosing a use rate and spray schedule program for Rubigan A.S.
3. Do not apply more than 48 fl. ozs. of Rubigan A.S. per acre per season on pears.
4. Apply Rubigan A.S. on a regular schedule, an extended regular combination schedule, or a post-infection schedule of a powdery mildew schedule. Whichever schedule is used, the Rubigan A.S. application prior to switching to a program utilizing protectant fungicides alone should include a protectant fungicide (a nonsterol inhibiting fungicide) in tank-mix combination with Rubigan A.S.
5. Use ground application equipment only.
6. A minimum of 3 fl. ozs./100 gals. dilute should be used for applications based on tree row volume calculations. Due to variability of spraying conditions, spray coverage and drying times, no less than 4 fl. oz. of Rubigan A.S. in combination with a protectant fungicide should be used per acre in tree row volume sprays.
7. Do not apply Rubigan A.S. more than 4 times per year.

**Pears: Disease Control Rates for Western United States (West of the Rocky Mountain/Continental Divide)
Rubigan A.S.**

CROP AND DISEASE	USE DIRECTIONS AND RECOMMENDATIONS
<p>Pears Scab (Post-Infection Schedule)</p>	<p>Rubigan A.S. may be applied on a post-infection schedule. The first application should be made within 96 hours (4 days) from the beginning of the first scab infection period. <u>Growers who do not have access to accurate pear scab infection period data should not use the post-infection schedule.</u></p> <p>Use Rates: Apply Rubigan A.S. at 9 to 12 fl. ozs. per acre within 96 hours from the beginning of pear scab infection period, and follow with a second application at 6 to 9 fl. ozs. per acre 7 days later. When severe scab infection periods occur, use the higher end of the Rubigan A.S. rate range for each application. Do not exceed 12 fl. ozs. per acre per application.</p> <p>Post-infection applications of Rubigan A.S. should be based on the following procedures explained in paragraphs 1 to 3 below, which determine the proper timing for Rubigan A.S. applications. Paragraph 1 will always determine the proper timing of the first Rubigan A.S. application. To determine the proper timing of subsequent applications, the situations explained in paragraphs 2, and 3 must be considered.</p> <ol style="list-style-type: none"> 1. The first Rubigan A.S. application should be made within 96 hours (4 days) from the beginning of the first primary pear scab infection period. 2. If one or more scab infection periods occur within 3 days after a Rubigan A.S. application, the Rubigan A.S. should be applied within 7 days of the previous Rubigan A.S. application. Do not allow the spray interval to exceed 7 days in this situation. 3. If no pear scab infection periods occur within 3 days after a Rubigan A.S. application, then apply Rubigan A.S. within 96 hours (4 days) after the beginning of the next scab infection period.
<p>Pears Powdery Mildew</p>	<p>For the control of powdery mildew, Rubigan A.S. should be applied on the following schedule as indicated by the stage of crop development.</p> <ol style="list-style-type: none"> 1. Tight Cluster. 2. Pink 3. Petal Fall 4. First Cover <p>Use Rates: For the control of powdery mildew, use Rubigan A.S. alone or in combination at 6 to 9 fl. ozs. per acre for light to moderate infection levels or 9 to 12 fl. ozs. per acre for severe infection levels starting at green tip. Do not allow the spray interval to exceed 14 days. Do not exceed 12 fl. ozs. per acre per application.</p> <p>Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. alone or in tank-mix combination at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to run-off with conventional ground spray equipment.</p> <p>Concentrate Spray: (less than 200 gallons per acre): Apply Rubigan A.S. at 6 to 12 fl. ozs. per acre.</p>

1. Do not apply Rubigan A.S. within 30 days of harvest.
2. Climatic conditions, varietal susceptibility and disease history of the orchard should be considered when choosing a use rate and spray schedule program for Rubigan A.S.
3. Do not apply more than 48 fl. ozs. of Rubigan A.S. per acre per season on pears.
4. Apply Rubigan A.S. on a regular schedule, an extended regular combination schedule, or a post-infection schedule of a powdery mildew schedule. Whichever schedule is used, the Rubigan A.S. application prior to switching to a program utilizing protectant fungicides alone should include a protectant fungicide (a nonsterol inhibiting fungicide) in tank-mix combination with Rubigan A.S.
5. Use ground application equipment only.
6. A minimum of 3 fl. ozs./100 gals. dilute should be used for applications based on tree row volume calculations. Due to variability of spraying conditions, spray coverage and drying times, no less than 4 fl. ozs. of Rubigan A.S. in combination with a protectant fungicide should be used per acre in tree row volume sprays.
7. Do not apply Rubigan A.S. more than 4 times per year.

**Pecans: Disease Control Rates
Rubigan A.S.**

CROP	USE DIRECTIONS AND RESTRICTIONS
Pecans	<p>Use Rates: Do not apply less than 9 fl. ozs. or more than 12 fl. ozs. of Rubigan A.S. per acre. Use the higher range of the Rubigan A.S. rates during conditions suitable for heavy disease infection (i.e., for scab, several hours of leaf wetting at temperatures above 50°).</p> <p>Spray Volume Per Acre: Dilute Spray (200 or more gallons per acre): Apply Rubigan A.S. at the rate of 3 or more fl. ozs. per 100 gallons of water in a uniform spray applied to the point of run-off with conventional ground spray equipment. Do not exceed 12 fl. ozs. per acre.</p> <p>Concentrate Spray: (less than 200 gallons per acre), use ground application equipment only: Apply Rubigan A.S. at 9 to 12 fl. ozs. per acre.</p> <p>Application Schedule: For the control of scab and powdery mildew, apply Rubigan A.S. at 7 to 10 day schedule starting at bud break. Continue applications up to and including the point where nuts are up to one-half inch (1/2") long. Thereafter, use Rubigan A.S. in tank-mix combination with a protectant fungicide at its labeled use rate. The Rubigan A.S. application prior to switching to a program utilizing a protectant-only application should include a protectant fungicide (a nonsterol-inhibiting fungicide with limited curative activity) as a tank-mix combination.</p> <p>Do not use Rubigan A.S. on the Wichita variety.</p> <p>Do not apply Rubigan A.S. within 30 days of harvest.</p> <p>Do not apply more than 48 fl. ozs. of Rubigan A.S. per acre per season on Pecans</p> <p>Do not apply Rubigan A.S. more than 4 times per year.</p>

**Hops: Disease Control Rates for Washington, Oregon and Idaho.
Rubigan A.S.**

CROP AND DISEASE	USE RATE PER ACRE (FL OZ)	MAXIMUM SPRAY INTERVAL (DAYS)	USE DIRECTIONS AND RESTRICTIONS
Hops Powdery Mildew	7	14	<p>Restrictions: Do not apply more than 28 fl oz of Rubigan A.S. per acre per year.</p> <p>Make applications when powdery mildew is expected.</p> <p>Preharvest Interval: Do not apply within 10 days of harvest.</p>

**Grapes: Disease Control Rates for Eastern United States (East of the Rocky Mountain Continental Divide)
Rubigan A.S.**

CROP	USE RATE PER ACRE (FL OZ)	MAXIMUM SPRAY INTERVAL (DAYS)	USE DIRECTIONS AND RESTRICTIONS
Grapes Powdery Mildew Pre-bloom Sprays Post-bloom Sprays Summer Sprays	3-4 5-6 5-6	14-18 14-18 14-18	<p>Application Timing: Rubigan A.S. may be applied alone or in tank mix combinations with labeled 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.</p> <p>Lower rates are labeled for early season applications when disease pressure is less intense. Applications of Rubigan A.S. at rates higher than labeled at pre-bloom may result in slight foliar injury consisting of leaf cupping and darker green leaf color.</p> <p>Minimum Spray Concentration: 3 fl. ozs. per 100 gallons of water.</p> <p>Maximum Rates:</p> <ul style="list-style-type: none"> ▪ Do not apply more than 6 fl. ozs. of Rubigan A.S. per acre per application. ▪ Do not apply more than 21 fl. ozs. of

			<p>Rubigan A.S. per season.</p> <ul style="list-style-type: none"> Do not apply Rubigan A.S. within 21 days of harvest. Do not apply Rubigan A.S. more than 4 times per year.
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**Grapes: Disease Control Rates Western United States (West of the Rocky Mountain Continental Divide)
Rubigan A.S.**

CROP	USE RATE PER ACRE (FL OZ)	MAXIMUM SPRAY INTERVAL (DAYS)	USE DIRECTIONS AND RESTRICTIONS
Grapes Powdery Mildew (Pre-bloom) 18-24" Shoot Full Bloom Post-bloom 2 nd Post-Bloom	 3-4 5 6 6	 14-18 14-18 14-18 14-18	Lower rates are labeled for early season applications when disease pressure is less intense. Applications of Rubigan A.S. at rates higher than labeled at prebloom may result in slight foliar injury consisting of: leaf cupping and darker green leaf color. Minimum Spray Concentration: 3 fl. ozs. per 100 gallons of water. Maximum Rates: Do not apply more than 6 fl. ozs. of Rubigan A.S. per acre per application. Do not apply more than 21 fl. ozs. of Rubigan A.S. per season. Do not apply Rubigan A.S. within 21 days of harvest. Do not apply Rubigan A.S. more than 4 times per year.

STORAGE AND DISPOSAL

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

Pesticide Storage: Avoid freezing. Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose of waste.

Pesticide Disposal: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. After cleaning, if recycling is not available, puncture and dispose of in a sanitary landfill or by incineration or if allowed by State and local authorities by burning. If burned stay out of smoke.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.
For other product information, contact GOWAN COMPANY or see Material Safety Data Sheet.

NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on test believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Gowan Company. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer and User.

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EPA Text Pending: Rubigan AS Ag add hops (to EPA 1/04/10)