

264-825

4/9/2009

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Attention: Melvin Tolliver  
Bayer CropScience  
P.O. Box 12014  
2 T.W. Alexander Dr.  
Research Triangle Park, NC 27709

APR 9 2009

Subject: Proline 480 SC Fungicide  
EPA Registration No. 264-825  
Your PRIA application dated October 26, 2007 associated with Decision #386009, and Petition #7F7279, Decision #386010, amends label's existing wheat and barley uses with spray surfactant statement

Dear Mr. Tolliver,

The amendment referred to above, submitted in connection with registration under FIFRA, as amended, has been reviewed and is acceptable provided that you submit a revised final printed label complying with the conditions as described herein, within 45 days of the date of this letter. A copy of the label stamped "Accepted with Comments" is included for your records.

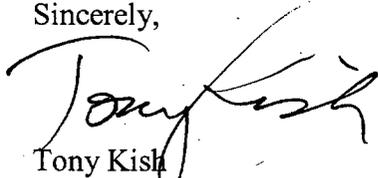
1. In the 'Canola' table's 'General Comments' section, on page 5, revise the fourth sentence, to read, "*A maximum of 11.4 fl oz. of PROLINE 480 SC ...may be applied per acre per year.*"
2. Revise the second to last sentence in the 'General Comments' section of the 'Rapeseed' table, on page 7, so that it reads, "*A maximum 17.1 fl oz. of PROLINE 480 SC ...may be applied per acre per year.*"
3. Under 'General Comments' in the 'Peanut' table, on page 8, revise its second to last sentence to read, "*A maximum 22.8 fl oz. of PROLINE 480 SC ...may be applied per acre per year.*"
4. The final sentence in the 'Soybean' table's 'General Comment' section, on page 9, must be revised as, "*Do not apply more than 9 fl. oz. of PROLINE 480 SC per acre per use season.*"
5. On page 10, in the 'Wheat' table's 'General Comments' section, delete the extraneous period following the second to last sentence.

Page 2 of 2  
Proline 480 SC Fungicide  
EPA Registration No. 264-825

- 6. Under the product name at the top of page 1, change "various crops" to "listed crops."
- 7. On page 3, in the fourth line from the bottom delete the asterisk.
- 8. From the top of page 4, delete "\*\*Note:\*\*".
- 9. On page 4, in the second sentence of the second paragraph change "should be exceeded" to "must be exceeded."
- 10. Submit and/or cite all data required for registration of your product under FIFRA Section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for re-registration of your product under FIFRA Section
- 11. Submit revised enforcement methods, by January 1, 2010, for the LC/MS/MS Method RPA JA/03/01 for plants, and LC/MS/MS Method Bayer Report No. 200537 for ruminants, which must include at least two multiple reaction monitoring (MRM) transitions to preclude the need for a confirmatory method.
- 12. By May 1, 2011, a valid immunotoxicity study must be submitted to the Agency to satisfy guideline requirement (OPPTS 870.7800). An earlier study (MRID 42626438) in the Prothioconazole data base was reviewed by the Agency, and found unacceptable.

If you have any questions, please contact Bryant Crowe by phone at (703) 305-0025 or via email at [crowe.bryant@epa.gov](mailto:crowe.bryant@epa.gov).

Sincerely,



Tony Kish  
Product Manager (Team 22)  
Fungicide Branch  
Registration Division (7505P)

Enclosures

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ACCEPTED  
with COMMENTS  
in EPA Letter Dated

APR 9 2009  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended for the pesticide  
registered under EPA Reg. No. 264-825

GROUP	3	FUNGICIDE
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# PROLINE™ 480 SC Fungicide

For control of specified diseases on various crops.

Active Ingredient: Prothioconazole, 2-[2-(1-Chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-1,2-dihydro-3H-1,2,4-triazole-3-thione.....41.0%

Inert Ingredients: .....59.0%

Contains 4 pounds Prothioconazole per gallon 100.0%

EPA Reg. No. 264-825

EPA Est.

**STOP - Read the label before use**  
**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

### FIRST AID

<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further 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 IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**NOTE TO PHYSICIAN:** No specific antidote. Treat symptomatically.

### PRECAUTIONARY STATEMENTS

#### HAZARD (TO HUMANS AND DOMESTIC ANIMALS)

#### CAUTION

Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes and clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

**Personal Protective Equipment**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Control Statements**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**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.
- Wash the outside of gloves before removing.

**ENVIRONMENTAL HAZARDS**

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 or rinsate.

This product is toxic to estuarine/marine invertebrates, and freshwater/estuaries/marine aquatic plants. 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 or rinsate.

Prothioconazole-desthio (a degradate of prothioconazole) is known to leach through soil into ground water under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

Drift and runoff are hazardous to aquatic organisms in water adjacent to treated areas. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow watertables are more prone to produce runoff that contains this product. 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 rainfall-runoff. 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.

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 and notification to workers (as applicable). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

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

- Coveralls
- Chemical-resistant gloves made of any waterproof material.
- Shoes plus socks

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking, invert to prevent leakage. If the container is leaking or material is spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response Telephone No. is 1-800-334-7577.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on-site or at an approved waste disposal facility.

**Container Disposal:** Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling, if available. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### GENERAL INFORMATION

PROLINE™ 480 SC is a broad-spectrum systemic fungicide for the control of Ascomycetes, Basidiomycetes and Deuteromycetes diseases in a variety of crops including barley, canola, dry bean crop group (chickpeas, lentils), peanuts, rapeseed, Indian rapeseed, field mustard, crambe, soybean, sugar beets and wheat. Under conditions conducive to extended infection periods or high disease pressure, additional fungicide applications beyond the number allowed by this label may be needed. Under these conditions use another fungicide registered for the crop/disease. Equipment must be properly calibrated before use.

### Resistance Management Statement

PROLINE 480 SC is a Group 3 fungicide which exhibits no known cross-resistance to other fungicide groups. However, fungal pathogens are known to develop resistance to products with the same mode of action when used repeatedly. Any fungal population may contain or develop individuals that are resistant to PROLINE 480 SC and other Group 3 fungicides. If Group 3 fungicides are used repeatedly in the same field or in successive years as the primary method of control for targeted diseases, the resistant isolates may eventually dominate the fungal population. Because resistance development cannot be predicted, the use of this product should conform to resistance management strategies established for the crop and use area. Such strategies may include rotation and /or tank mixing with products having different modes of action or limiting the total number of applications per season. Contact your local extension specialist, certified crop advisor, and/or manufacturer for fungicide resistance management and/or integrated disease management recommendations for specific crops and pathogen populations. Bayer CropScience encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label.

### Spray Equipment/Volumes

PROLINE 480 SC may be applied by either ground or aerial application equipment. Apply in a minimum of 10 gallons of spray solution per acre by ground sprayer or in a minimum of 5 gallons of spray solution per acre by aircraft spray equipment. Check equipment calibration frequently. Complete coverage and uniform application are essential for the most effective results, especially when lower spray volumes are applied. If necessary, increase the spray volume per acre for complete crop coverage.

### Mixing Procedures

Prepare no more spray mixture than is necessary for the immediate operation. Thoroughly clean spray equipment before using this product. Maintain maximum agitation throughout the spray operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to the previously treated area or dispose of the rinsate according to local regulations.

**PROLINE 480 SC Alone:** Add ½ of the required amount of water to the mix tank. With the agitator running, add the PROLINE 480 SC to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the product has completely and uniformly dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**PROLINE 480 SC + Tank-Mix Partners:** Add ½ of the required amount of water to the mix tank. Start the agitator running before adding any of the tank-mix partners. In general, tank-mix partners should be added in this order: products packaged in water-soluble packaging\*, wettable powders, wettable granules (dry flowables), liquid flowables, liquids and emulsifiable concentrates. Always allow each tank-mix partner to become fully and uniformly dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

\* **Note:** When using PROLINE 480 SC in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank-mix partner, including PROLINE 480 SC. Allow the water-soluble packaging to completely disperse before adding any other tank-mix partner to the tank.

If using PROLINE 480 SC in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations; which appear on the tank-mix product label. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations must be followed. This product must not be mixed with any product that prohibits such mixing. Tank mixtures or other applications of products are permitted only in those states in which the products are registered.

PROLINE 480 SC is compatible with most insecticide, fungicide, herbicide and foliar nutrient products. However, the physical compatibility of PROLINE 480 SC with tank-mix partners should be tested before use. To determine the physical compatibility of PROLINE 480 SC with other products, use a jar test, as described below.

Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquids, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. For further information contact your local Bayer CropScience representative.

The crop safety of all potential tank mixes including additives and other pesticides on all crops has not been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop should be confirmed. To test for crop safety, apply PROLINE 480 SC to the target crop in a small area and in accordance with label instructions for the target crop.

**Aerial Application:** Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. Do not apply directly to humans or animals.

**Chemigation:** Do not apply this product through any type of irrigation system.

**Adjuvants:** PROLINE 480 SC is recommended to be used with a registered non-ionic surfactant at the lowest recommended labeled rate for most crops. Refer to the individual crop recommendations for those specific uses where a surfactant is not recommended.

**Recommendations to Avoid Spray Drift**

Do not make applications when conditions favor drift beyond the target application area. When drift may be a problem, take measures to reduce drift, including:

- 1. Do not spray if wind speeds are or become excessive. Do not spray if wind speed is 15 mph or greater. If non-target crops are located downwind, use caution when spraying if wind is present. Do not spray if winds are gusty.
- 2. Use caution when conditions are favorable for drift (high temperatures, drought, low relative humidity).
- 3. Do not apply when temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.

**ROTATIONAL RESTRICTIONS**

Treated areas may be replanted with any crop specified on this label as soon as practical after last application. For crops not listed on this label, do not plant back within 30 days of last application.

**USE DIRECTIONS FOR SPECIFIC CROPS**

PROLINE 480 SC provides control or suppression of many important diseases of barley, canola, the dry bean crop group (including chickpeas, lentils), peanuts, rapeseed, Indian rapeseed, field mustard, crambe, soybean, sugar beets and wheat. When reference is made to disease suppression, suppression can mean either erratic control from good to fair or consistent control at a level below that obtained with the best commercial disease control products.

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Barley	Fusarium Head Blight ( <i>Fusarium</i> spp.) (Suppression Only)	4.3 to 5.7 fl oz. per acre
	Leaf and Stem Diseases Net Blotch ( <i>Pyrenophora teres</i> ) Scald ( <i>Rhynchosporium secalis</i> ) Spot Blotch ( <i>Cochliobolus sativus</i> )	2.8 to 4.3 fl oz. per acre
	<b>Application Directions</b> <b>Fusarium Head Blight (Suppression Only):</b> Apply PROLINE 480 SC as a preventative foliar spray within the time period when 70 to 100% of the barley heads on the main stem are fully emerged (~ Feekes Growth Stages 10.3 to 10.5) when weather conditions are favorable for disease development and up to 3 to 5 days after full head emergence. Spray equipment must be set up to provide good coverage to barley heads. To achieve thorough barley head coverage using ground application equipment, it is recommended to use forward and backward mounted nozzles or nozzles that have a two-directional spray, such as Twinjet nozzles. Nozzles should be operated within the spray pressure recommendations suggested by the manufacturer.  <b>Leaf and Stem Diseases:</b> Apply PROLINE 480 SC as a preventive foliar spray when the earliest disease symptoms appear on the leaves or stems. Barley fields should be observed closely for early disease symptoms, particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development.	
<b>General Comments:</b> Apply up to two (2) applications of PROLINE® 480SC per year. Repeat applications using a 14-day spray interval if conditions remain favorable for continued or increasing disease development. For optimum disease control, the lowest labeled rate of a spray surfactant should be tank mixed with PROLINE 480. Applications may be made by ground or aerial spray equipment.  A maximum of 9.37 fl oz. of PROLINE 480 SC may be applied per acre per year. Do not apply two applications at 5.7 fl oz. per acre per year. PROLINE 480 SC may be applied up to the point where barley heads are in the full flower growth stage (Feekes 10.52). Do not apply within 32 days of harvest.		

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Canola	Sclerotinia Stem Rot ( <i>Sclerotinia sclerotiorum</i> )	4.3 to 5.7 fl oz. per acre
	<b>Application Directions</b> Apply PROLINE 480 SC when the canola crop is in the 20 - 50% bloom stage. This will be approximately 4-8 days after the canola crop begins to flower. Best protection will be achieved when the fungicide is applied prior to petals beginning to fall, and will allow for the maximum number of petals to be protected. The 4.3 fl oz. per acre rate is the recommended rate for most canola crops, however, the higher rate is recommended for fields with a history of heavy disease pressure or for dense crop stands. Good spray coverage of the plants is essential.	
<b>General Comments:</b> Apply up to two (2) applications of PROLINE 480 SC per year. Repeat applications as needed using a 14-day spray interval if conditions remain favorable for continued or increasing disease development. Applications may be made by ground or aerial spray equipment.  A maximum of 11.4 fl oz. of PROLINE 480 SC may be applied per year. PROLINE 480 SC may be applied until the 50% bloom stage. This will be when the canola crop is at its maximum yellow color, and prior to significant petal fall. Do not apply within 36 days of harvest.		

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Chickpea	Ascochyta Blight ( <i>Ascochyta</i> spp.)	4.3 to 5.7 fl oz. per acre
<p><b>Application Directions</b>            Apply PROLINE 480 SC at the first sign of disease. Use the higher use rate when conditions are favorable for severe disease pressure and/or when growing less disease resistant varieties.</p>		
<p><b>General Comments:</b> Apply up to three (3) applications of PROLINE 480 SC per year. Repeat applications as needed using a 10- to 14-day spray interval if conditions remain favorable for continued or increasing disease development. To optimize disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with PROLINE 480 SC. Applications may be made by ground or aerial spray equipment.</p> <p>A maximum of 17.1 fl oz. of PROLINE 480 SC may be applied per acre per year. Allow a minimum of 7 days from the last application until cutting or swathing the crop for harvest.</p>		

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Dried Shelled Peas and Beans Subgroup (except soybeans) <i>Lupinus</i> spp. (Grain, Sweet, White and White Sweet lupins) <i>Phaseolus</i> spp. (Field, Kidney, Dry lima, Navy, Pinto and Tepary beans) <i>Vigna</i> spp. (Adzuki bean, Blackeyed pea, Catjang, Cowpea, Crowder pea, Moth bean, Mung bean, Rice bean, Southern pea and Urd bean) Dry broad bean Guar Lablab bean <i>Pisum</i> spp. [Pea (including Field pea) and Pigeon pea]	White Mold ( <i>Sclerotinia sclerotiorum</i> )	4.3 to 5.7 fl oz. per acre
<p><b>Application Directions</b>            Apply PROLINE 480 SC at the first sign of disease. Use the higher use rate when conditions are favorable for severe disease pressure and/or when growing less disease resistant varieties.</p>		
<p><b>General Comments:</b> Apply up to three (3) applications of PROLINE 480 SC per year. Repeat applications as needed using a 5- to 14-day spray interval if conditions remain favorable for continued or increasing disease development. To optimize disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with PROLINE 480 SC. Applications may be made by ground or aerial spray equipment.</p> <p>A maximum of 17.1 fl oz. of PROLINE 480 SC may be applied per acre per year. Allow a minimum of 7 days from the last application until cutting or swathing the crop for harvest.</p>		

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Lentils	Ascochyta Blight ( <i>Ascochyta</i> spp.)	4.3 to 5.7 fl oz. per acre
	<b>Application Directions</b> Apply PROLINE 480 SC at early flower or at the first sign of disease. Use the higher use rate when conditions are favorable for severe disease pressure and/or when growing less disease resistant varieties.	
<p><b>General Comments:</b> Apply up to three (3) applications of PROLINE 480 SC per year. Repeat applications as needed using a 10- to 14-day spray interval if conditions remain favorable for continued or increasing disease development. To optimize disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with PROLINE 480 SC. Applications may be made by ground or aerial spray equipment.</p> <p>A maximum of 17.1 fl oz. of PROLINE 480 SC may be applied per acre per year. Allow a minimum of 7 days from the last application until cutting or swathing the crop for harvest.</p>		

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Rapeseed Indian rapeseed Field mustard Crambe	Sclerotinia Stem Rot ( <i>Sclerotinia sclerotiorum</i> )	4.3 to 5.7 fl oz. per acre
	<b>Application Directions</b> Apply PROLINE 480 SC when the crop is in the 20 - 50% bloom stage. Utilize the higher rate for fields with a history of heavy disease pressure or for dense crop stands. Good spray coverage of the plants is essential.	
<p><b>General Comments:</b> Apply up to two (2) applications of PROLINE 480 SC per year. Repeat applications as needed using a 14-day spray interval if conditions remain favorable for continued or increasing disease development. Applications may be made by ground or aerial spray equipment.</p> <p>A maximum of 11.4 fl oz. of PROLINE 480 SC may be applied per year. PROLINE 480 SC may be applied until the 50% bloom stage. Do not apply within 36 days of harvest.</p>		

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Peanut	<b>In-furrow and Banded</b> Cyindrocladium Black Rot ( <i>Cylindrocladium crotalariae</i> ) (Suppression Only)	0.4 fl oz. per 1000 row feet (5.7 fl oz. per acre)
	<b>Soil-Borne</b> Sclerotium Rot ( <i>Sclerotium rolfsii</i> ) (White Mold, Southern Blight, Southern Stem Rot) Rhizoctonia Limb Rot, Peg Rot, Pod Rot ( <i>Rhizoctonia solani</i> ) Cyindrocladium Black Rot ( <i>Cylindrocladium crotalariae</i> ) (Suppression Only)	5.7 fl oz. per acre
	<b>Foliar</b> Early Leaf Spot ( <i>Cercospora arachidicola</i> ) Late Leaf Spot ( <i>Cercosporidium personatum</i> ) Leaf Rust ( <i>Puccinia arachidis</i> ) Web Blotch ( <i>Phoma arachidicola</i> ) Leaf Scorch and Pepper Spot ( <i>Leptosphaerulina crassiasca</i> )	5.0 to 5.7 fl oz. per acre
	<b>Application Directions</b> <p><b>In-furrow and Banded Spray Program:</b> Apply 5.7 fl oz. per acre (0.4 fl oz. per 1000 row feet if on 36 inch row spacing) in the furrow at planting. PROLINE 480 SC may also be applied in a 4- to 6- inch band over the row at or near emergence.</p> <p><b>Foliar Disease Spray Program:</b> Apply the specified rate in a preventive spray schedule. Apply up to four (4) sprays using a 14-day interval. Use the higher use rate when conditions are favorable for severe disease pressure and/or when growing less disease resistant varieties.</p> <p><b>Soil-Borne Disease Spray Program:</b> For optimum control of the specified soil-borne diseases, four consecutive applications of PROLINE 480 SC must be made at 14-day intervals. In a typical 7 spray application program beginning 30-40 days after planting or as recommended by the local Extension Service, PROLINE 480 SC should be applied for sprays 3, 4, 5 and 6. Applications of fungicides with a different mode of action should be made prior to and following applications of PROLINE 480 SC to discourage development of resistant strains of fungi. Use PROLINE 480 SC in conjunction with cultural practices that are known to reduce the severity of soil-borne diseases, such as proper crop rotation practices.</p> <p>For control of soil-borne diseases when using a <b>Leaf Spot Advisory Program</b> schedule, apply PROLINE® 480 SC in the first advisory spray in July and continue PROLINE® 480 SC applications at 14-day intervals.</p> <p>PROLINE 480 SC must be carried by rainfall or irrigation into the root and pod zone for control of root and pod rots caused by <i>Sclerotium rolfsii</i> and <i>Rhizoctonia solani</i>. Drought conditions will decrease the effectiveness of PROLINE 480 SC against the root and pod rots.</p>	
<p><b>General Comments:</b> Apply up to four (4) applications of PROLINE 480 SC per year, including the in-furrow and banded applications. When planting varieties with good to excellent levels of resistance to foliar diseases, the application interval may be extended up to 21 days in the absence of soil borne diseases. A maximum of 22.8 fl oz. of PROLINE 480 SC may be applied per year. PROLINE 480 SC may be applied up to 14 days before harvest. Do not feed hay or threshings or allow livestock to graze in treated areas. Applications may be made by ground or aerial spray equipment.</p>		

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Soybean	Asian Soybean Rust ( <i>Phakopsora pachyrhizi</i> )	2.5 – 3.0 fl oz per acre
	Powdery Mildew ( <i>Microsphaera diffusa</i> )	
<p><b>Application Directions:</b> Apply PROLINE 480 SC as a broadcast foliar spray as a preventative spray or at first visible symptoms of disease. Repeat applications on a 10- to 21-day spray interval if environmental conditions are favorable for continued disease development. Use of the higher rate and shorter spray intervals are recommended when disease pressure is severe. Use of spray adjuvants may enhance performance of PROLINE 480 SC, especially when disease is already present at time of application. If utilized, apply the lowest labeled rate of a registered nonionic surfactant or spreader sticker. PROLINE 480 SC should be applied in a minimum of 15 gallons of spray solution by ground sprayer or in a minimum of 5 gallons per acre by aircraft spray equipment.</p> <p><b>General Comments:</b> Applications may not be made within 21 days of harvest. Do not apply more than 3 applications per season. Do not apply more than 9 fl oz./a per use season.</p>		

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Sugar beets	<b>Foliar Diseases</b>  Cercospora Leaf Spot ( <i>Cercospora beticola</i> )  Powdery Mildew ( <i>Erysiphe polygoni</i> )	4.3 to 5.7 fl oz. per acre
	<b>Soil-borne diseases</b>  Rhizoctonia Stem Canker, Crown rot ( <i>Rhizoctonia solani</i> )	
<p><b>Application Directions:</b></p> <p><b>Foliar disease control:</b> Apply PROLINE 480 SC at the first sign of disease. Use the higher use rate and shorter intervals when conditions are favorable for severe disease pressure and/or when growing less disease resistant varieties.</p> <p><b>Soil-borne disease control:</b> Apply PROLINE 480 SC in a seven-inch band at the 4-leaf to row closure growth stage.</p>		
<p><b>General Comments:</b> Apply up to 3 applications of PROLINE 480 SC per year. Repeat applications as needed using a 14- to 21-day spray interval depending on disease pressure. Use a 14-day spray interval under normal to heavy disease pressure and a 21-day spray interval under light disease pressure.</p> <p>To optimize disease control, the lowest labeled rate of a spray surfactant may be tank-mixed with PROLINE 480 SC. Applications may be made by ground or aerial spray equipment.</p> <p>A maximum of 17.1 fl oz of PROLINE 480 SC may be applied per acre per crop year. Allow a minimum of 7 days from the last application before harvesting.</p> <p>PROLINE is a Group 3 fungicide. To limit the potential for development of disease resistance:</p> <ul style="list-style-type: none"> <li>• Alternate every application of PROLINE 480 SC with a non-Group 3 fungicide.</li> </ul>		

RECOMMENDED APPLICATIONS		
CROP	DISEASE CONTROLLED	RATE OF PROLINE 480 SC
Wheat (spring, durum and winter)	Fusarium Head Blight ( <i>Fusarium</i> spp.) (Suppression Only)	4.3 to 5.7 fl oz. per acre
Triticale	<b>Leaf and Stem Diseases</b> Leaf Rust ( <i>Puccinia recondita</i> f.sp. <i>tritici</i> ) Septoria Leaf and Glume Blotch ( <i>Septoria tritici</i> , <i>S. nodorum</i> ) Stem Rust ( <i>Puccinia graminis</i> ) Tan Spot ( <i>Pyrenophora tritici-repentis</i> )	4.3 to 5.0 fl oz. per acre
	<b>Application Directions</b> <b>Fusarium Head Blight (Suppression Only):</b> Apply PROLINE 480 SC within the time period from when at least 75% of the wheat heads on the main stem are fully emerged (~ Feekes Growth Stages 10.4) to when 50% of the heads on the mainstem are in flower (~ Feekes Growth Stage 10.52). Optimal timing of application may be at or around 15% flower (~ Feekes 10.51). Spray equipment must be set up to provide good coverage to wheat heads. To achieve thorough wheat head coverage using ground application equipment, it is recommended to use forward and backward mounted nozzles or nozzles that have a two-directional spray, such as Twinjet nozzles. Nozzles should be operated within the spray pressure recommendations suggested by the manufacturer. <b>Leaf and Stem Diseases:</b> Apply PROLINE 480 SC as a preventive foliar spray when the earliest disease symptoms appear on the leaves or stems. Wheat fields should be observed closely for early disease symptoms, particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development.	
<b>General Comments:</b> Apply up to two (2) applications of PROLINE 480 SC per year. Repeat applications using a 14-day spray interval if conditions remain favorable for continued or increasing disease development. For optimum disease control, the lowest labeled rate of a spray surfactant should be tank mixed with PROLINE 480. Applications may be made by ground or aerial spray equipment. A maximum of 9.37 fl oz. of PROLINE 480 SC may be applied per acre per year. Do not apply two applications at 5.7 fl oz per acre per year.. PROLINE 480 SC may be applied up to the point where wheat heads are in the full flower growth stage (Feekes 10.52). Do not apply within 30 days of harvest.		

**IMPORTANT: READ BEFORE USE**

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