



**Material Safety Data Sheet**  
**PROLINE® 480 SC FUNGICIDE**

MSDS Number: 102000014342  
 MSDS Version 1.0  
 Revision Date: 03/08/2007

**SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

**Product Name** PROLINE® 480 SC FUNGICIDE  
**MSDS Number** 102000014342  
**EPA Registration No.** 264-825

Bayer CropScience  
 2 T.W. Alexander Drive  
 Research Triangle PK, NC 27709  
 USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)  
 For Product Information call: 1-866-99BAYER (1-866-992-2937)

**SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Prothioconazole	178928-70-6	41.00

**SECTION 3. HAZARDS IDENTIFICATION**

*NOTE: Please refer to Section 11 for detailed toxicological information.*

**Emergency Overview** Caution! Harmful by inhalation and if swallowed. Moderate eye irritation. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapour or mist.

<b>Physical State</b>	suspension
<b>Odor</b>	slight characteristic
<b>Appearance</b>	off-white
<b>Routes of Exposure</b>	Eye contact, Ingestion, Inhalation, Skin contact
<b>Immediate Effects</b>	
<b>Eye</b>	Mild eye irritation.
<b>Skin</b>	May cause slight irritation. Avoid contact with clothing.
<b>Ingestion</b>	Harmful if swallowed.
<b>Inhalation</b>	Harmful if inhaled. Avoid breathing spray mist. Mists may cause respiratory tract irritation.

**SECTION 4. FIRST AID MEASURES**



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<b>General</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye</b>	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 physician or poison control center immediately.
<b>Skin</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
<b>Inhalation</b>	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
<b>Notes to Physician Treatment</b>	There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

**SECTION 5. FIRE FIGHTING MEASURES**

<b>Flash point</b>	no data available
<b>Suitable Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Fire Fighting Instructions</b>	Avoid contact with spilled product or contaminated surfaces. Evacuate personnel to safe areas. Keep out of smoke. Fight fire from upwind position. Cool closed containers/ tanks exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.  Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Isolate hazard area. Keep unauthorized people away. Use personal protective equipment.
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**Methods for Cleaning Up** Take up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material). Collect and transfer the product into a properly labelled and tightly closed container. Contaminated soil may have to be removed and disposed.

Clean contaminated floors and objects thoroughly, observing environmental regulations. Decontaminate tools and equipment following cleanup.

**Additional Advice** Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13. Do not allow to enter soil, waterways or waste water canal. Do not allow product to contact vegetation.

**SECTION 7. HANDLING AND STORAGE**

**Handling Procedures** Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.

**Storing Procedures** 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. Protect from freezing.

**Work/Hygienic Procedures** Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Handle in accordance with good industrial hygiene and safety practice.

Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

**Min/Max Storage Temperatures** Do not transport or store below 0 °C / 32 °F

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**General Protection** Follow all label instructions. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

**Eye/Face Protection** protective eyewear

**Hand Protection** Chemical resistant nitrile rubber gloves

**Body Protection** Wear long-sleeved shirt and long pants and shoes plus socks.

**Respiratory Protection** When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the



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appropriate regulatory standards and/or industry recommendations.

**Exposure Limits**

This product contains material which are Trade Secret and may have Occupational Exposure Limits. If more information is required, call the product information number listed in Section 1.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	off-white
<b>Physical State</b>	suspension
<b>Odor</b>	slight characteristic
<b>pH</b>	7 (100 %) at 20 °C
<b>Density</b>	approx. 1.18 g/cm <sup>3</sup> at 20 °C
<b>Evaporation rate</b>	no data available
<b>Water solubility</b>	miscible
<b>Decomposition Temperature</b>	no data available

**SECTION 10. STABILITY AND REACTIVITY**

<b>Conditions to Avoid</b>	freezing
<b>Incompatibility</b>	no data available
<b>Hazardous Decomposition Products</b>	no data available
<b>Hazardous Reactions</b>	Stable under recommended storage conditions.

**SECTION 11. TOXICOLOGICAL INFORMATION**

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the technical-grade active ingredient, prothioconazole.

<b>Acute Oral Toxicity</b>	female rat: LD50: > 2,000 - < 5,000 mg/kg (up & down method)
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**Acute Dermal Toxicity** male/female combined rat: LD50: > 5,000 mg/kg

**Acute Inhalation Toxicity** male/female combined rat: LC50: > 1.6 mg/l  
Exposure time: 4 h  
Determined in the form of liquid aerosol.  
Highest attainable concentration.  
No deaths  
(actual)

male/female combined rat: LC50: > 6.4 mg/l  
Exposure time: 1 h  
Determined in the form of liquid aerosol.  
Highest attainable concentration.  
No deaths  
(actual)

**Skin Irritation** rabbit: Slight irritation.

**Eye Irritation** rabbit: Minimally irritating.

**Sensitization** guinea pig: Non-sensitizing.

**Chronic Toxicity** Prothioconazole produced liver and kidney effects in chronic oral gavage studies in rats and dogs. In addition, secondary urinary bladder effects occurred at high dose levels in the rat.

**Assessment Carcinogenicity**

Prothioconazole was not carcinogenic in lifetime studies in rats and mice.

**ACGIH**

None.

**NTP**

None.

**IARC**

None.

**OSHA**

None.

**Reproductive & Developmental Toxicity**

**REPRODUCTION:** Prothioconazole caused decreases in litter size, pup body weight gains, and neonatal spleen weights at maternally toxic doses in a multi-generation study in rats.

**DEVELOPMENTAL TOXICITY:** Prothioconazole produced developmental effects in conjunction with maternal toxicity in oral gavage developmental studies in rats and rabbits. Developmental toxicity was not observed in rats exposed dermally to prothioconazole.

**Neurotoxicity**

Prothioconazole produced slight transient neurobehavioral effects with no correlating morphological changes in the neural tissues or skeletal muscles in acute and subchronic neurotoxicity screening studies in rats. Prothioconazole is



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not neurotoxic.

**Mutagenicity** Prothioconazole was not mutagenic or genotoxic based on the overall weight of evidence from a battery of in vitro and in vivo tests.

**SECTION 12. ECOLOGICAL INFORMATION**

**Environmental Precautions** Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not allow to get into surface water, drains and ground water.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**General Disposal Guidance** Dispose in accordance with all local, state/provincial and federal regulations. Follow container label instructions for disposal of wastes generated during use in compliance with the product label. Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

**Container Disposal** Do not re-use empty containers. Triple rinse containers. Puncture container to avoid re-use. Follow advice on product label and/or leaflet.

**SECTION 14. TRANSPORT INFORMATION**

TRANSPORTATION CLASSIFICATION:  
Not regulated for all modes of transport

FREIGHT CLASSIFICATION:  
Insecticides or Fungicides, N.O.I.; other than poison

**SECTION 15. REGULATORY INFORMATION**

This product contains material(s) which are Trade Secret and are on various Regulatory Lists. These material(s) are not listed below. If more information is required, call the product information number listed in Section 1.

**EPA Registration No.** 264-825

**US Federal Regulations**

**TSCA list**

None.

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

None.



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**SARA Title III - Section 302 - Notification and Information**

None.

**SARA Title III - Section 313 - Toxic Chemical Release Reporting**

None.

**US States Regulatory Reporting**

**CA Prop65**

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**

None.

**Canadian Regulations**

**Canadian Domestic Substance List**

None.

**Environmental**

**CERCLA**

None.

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

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**SECTION 16. OTHER INFORMATION**

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NFPA 704 (National Fire Protection Association):

Health - 1      Flammability - 0      Reactivity - 0      Others - none

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: New Material Safety Data Sheet.

Revision Date: 03/08/2007

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