



**Safety Data Sheet**

**PROSARO® 250 EC FUNGICIDE**

SDS Number: 102000007908

SDS Version 1.1

Revision Date: 02/19/2014

Print Date: 02/19/2014

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

**Product name**                    PROSARO® 250 EC FUNGICIDE  
**SDS Number**                     102000007908  
**Product code (UVP)**           05676428, 81782423  
**PCP Registration No.**         29821  
**Product Use**                     Fungicide

Bayer CropScience Inc  
 #200, 160 Quarry Park Blvd, SE  
 Calgary, Alberta T2C 3G3  
 Canada

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)  
 For Product Information call: 1-888-283-6847

**SECTION 2. HAZARDS IDENTIFICATION**

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

**Emergency Overview**        Danger! Harmful if swallowed, inhaled or absorbed through the skin. Moderate eye irritation. Avoid contact with skin, eyes and clothing. May cause skin irritation. Avoid inhalation of vapour or mist.

**Physical State**                 Liquid clear to slightly turbid

**Odor**                             aromatic

**Appearance**                 tan

**Exposure routes**             Eye contact, Inhalation, Skin Absorption, Ingestion

**Immediate Effects**

**Eye**                             Moderate eye irritation may occur.

**Skin**                            Harmful if absorbed through skin. May cause irritation.

**Ingestion**                    Harmful if swallowed.

**Inhalation**                   Harmful if inhaled.

**Chronic or Delayed Long-Term**

This product or its components may have target organ effects. This product contains ingredients that are considered to be probable or suspected human carcinogens (see Section 11 - Chronic).



## Safety Data Sheet

### PROSARO® 250 EC FUNGICIDE

SDS Number: 102000007908  
SDS Version 1.1

**Potential Environmental Effect** Toxic to birds. Toxic to aquatic organisms. Toxic to wildlife. This product may cause adverse effects on non-target plants.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Prothioconazole	178928-70-6	12.76
Tebuconazole	107534-96-3	12.76
N,N-Dimethyl decanamide	14433-76-2	59.38

#### SECTION 4. FIRST AID MEASURES

<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>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 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>	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Call a physician or poison control center immediately.
<b>Ingestion</b>	Rinse out mouth and give water in small sips to drink. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. DO NOT induce vomiting unless directed to do so by a physician or poison control center.
<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</b>	
<b>Signs and Symptoms</b>	No symptoms known or expected.
<b>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>	> 148 °C / > 298 °F
<b>Autoignition temperature</b>	no data available



## Safety Data Sheet

### PROSARO® 250 EC FUNGICIDE

SDS Number: 102000007908  
SDS Version 1.1

<b>Lower Flammability Limit</b>	no data available
<b>Upper Flammability Limit</b>	no data available
<b>Explosiveness</b>	not applicable
<b>Fire and Explosion Hazards</b>	In the event of fire the following may be released: Hydrogen chloride (HCl) Hydrogen cyanide (hydrocyanic acid) Carbon monoxide (CO) Sulphur oxides Nitrogen oxides (NOx)
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	High volume water jet
<b>Fire Fighting Instructions</b>	Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.  In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.
<b>Additional advice</b>	Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

## SECTION 7. HANDLING AND STORAGE

<b>Handling procedures</b>	Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.
<b>Storing Procedures</b>	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only.



## Safety Data Sheet

### PROSARO® 250 EC FUNGICIDE

SDS Number: 102000007908  
SDS Version 1.1

Keep away from food, drink and animal feedingstuffs.

#### 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.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General Protection</b>	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.
<b>Eye/Face Protection</b>	Chemical resistant goggles must be worn.
<b>Hand protection</b>	Chemical resistant nitrile rubber gloves
<b>Body Protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>Respiratory protection</b>	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

#### Exposure Limits

Prothioconazole	178928-70-6	OES BCS*	TWA	1.4 mg/m <sup>3</sup>
Tebuconazole	107534-96-3	OES BCS*	TWA	0.2 mg/m <sup>3</sup>

\*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	tan
<b>Physical State</b>	Liquid clear to slightly turbid
<b>Odor</b>	aromatic
<b>pH</b>	5.0 - 7.0 (1 %) at 23 °C
<b>Vapor Pressure</b>	no data available



## Safety Data Sheet

### PROSARO® 250 EC FUNGICIDE

SDS Number: 102000007908  
SDS Version 1.1

<b>Vapor Density (Air = 1)</b>	no data available
<b>Density</b>	ca. 0.98 g/cm <sup>3</sup> at 20 °C
<b>Evaporation rate</b>	no data available
<b>Boiling Point</b>	no data available
<b>Melting / Freezing Point</b>	no data available
<b>Water solubility</b>	emulsifiable
<b>Minimum Ignition Energy</b>	not applicable
<b>Decomposition temperature</b>	Stable under normal conditions.
<b>Partition coefficient: n-octanol/water</b>	no data available
<b>Viscosity</b>	49.9 mPa.s at 20 °C
<b>Other information</b>	Further safety related physical-chemical data are not known.

## SECTION 10. STABILITY AND REACTIVITY

<b>Conditions to avoid</b>	Extremes of temperature and direct sunlight.
<b>Incompatibility</b>	Store only in the original container.
<b>Hazardous Decomposition Products</b>	No decomposition products expected under normal conditions of use.
<b>Hazardous reactions</b>	No hazardous reactions when stored and handled according to prescribed instructions.

## SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the technical-grade active ingredients, prothioconazole and tebuconazole.

<b>Acute oral toxicity</b>	rat: LD50: > 2,500 mg/kg
<b>Acute dermal toxicity</b>	rat: LD50: > 4,000 mg/kg



## Safety Data Sheet

### PROSARO® 250 EC FUNGICIDE

SDS Number: 102000007908  
SDS Version 1.1

<b>Acute inhalation toxicity</b>	rat: LC50: > 5.153 mg/l Exposure time: 4 h
<b>Skin irritation</b>	rabbit: Irritating to skin.
<b>Eye irritation</b>	rabbit: Irritating to eyes.
<b>Sensitisation</b>	guinea pig: Non-sensitizing. OECD Test Guideline 406
<b>Chronic toxicity</b>	Prothioconazole did not cause specific target organ toxicity in experimental animal studies.  Tebuconazole did not cause specific target organ toxicity in experimental animal studies.

#### Assessment Carcinogenicity

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

Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): liver. The mechanism of tumour formation is not considered to be relevant to man.

#### ACGIH

None.

#### NTP

None.

#### IARC

None.

#### OSHA

None.

<b>Reproductive toxicity</b>	Prothioconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Prothioconazole is related to parental toxicity.  Tebuconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Tebuconazole is related to parental toxicity.
<b>Developmental Toxicity</b>	Prothioconazole caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Prothioconazole are related to maternal toxicity.  Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.
<b>Mutagenicity</b>	Prothioconazole was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.



**Safety Data Sheet**

**PROSARO® 250 EC FUNGICIDE**

SDS Number: 102000007908  
SDS Version 1.1

Tebuconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**SECTION 12. ECOLOGICAL INFORMATION**

<b>Toxicity to fish</b>	Rainbow trout ( <i>Oncorhynchus mykiss</i> ) LC50: 3.94 mg/l Exposure time: 96 h
<b>Toxicity to aquatic plants</b>	<p>Pseudokirchneriella subcapitata Growth rate IC50: 9.5 mg/l Exposure time: 72 h</p> <p>Skeletonema costatum Growth rate EC50: 0.046 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole.</p>
<b>Acute Toxicity to Aquatic Invertebrates</b>	Water flea ( <i>Daphnia magna</i> ) EC50: 8.8 mg/l Exposure time: 48 h
<b>Environmental precautions</b>	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. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not apply when weather conditions favor runoff or drift. Apply this product as specified on the label.
<b>Ecological Information</b>	No other effects to be mentioned.



**Safety Data Sheet**

**PROSARO® 250 EC FUNGICIDE**

SDS Number: 102000007908  
SDS Version 1.1

**SECTION 13. DISPOSAL CONSIDERATIONS**

**General Disposal Guidance** Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations. It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Follow container label instructions for disposal of wastes generated during use in compliance with the product label.

**Container Disposal** Do not re-use empty containers. Triple rinse containers. Add washings to sprayer at time of filling. Puncture container to avoid re-use. Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.

**SECTION 14. TRANSPORT INFORMATION**

**TDG** Not dangerous goods / not hazardous material

**49CFR** Not dangerous goods / not hazardous material

**IMDG**

UN number **3082**  
Class 9  
Packaging group III  
Marine pollutant YES  
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOLE, PROTHIOCONAZOLE SOLUTION)

**IATA**

UN number **3082**  
Class 9  
Packaging group III  
Environm. Hazardous Mark YES  
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOLE, PROTHIOCONAZOLE SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

**SECTION 15. REGULATORY INFORMATION**

**PCP Registration No.** 29821

**US Federal Regulations**

**TSCA list**

N,N-Dimethyl decanamide

14433-76-2





## Safety Data Sheet

### PROSARO® 250 EC FUNGICIDE

SDS Number: 102000007908  
SDS Version 1.1

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

None.

#### 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

Tebuconazole	107534-96-3
--------------	-------------

#### International Regulations

##### European Inventory of Existing Commercial Substances (EINECS)

N,N-Dimethyl decanamide	14433-76-2
-------------------------	------------

## SECTION 16. OTHER INFORMATION

#### NFPA 704 (National Fire Protection Association):

Health - 1	Flammability - 1	Instability - 0	Others - none
------------	------------------	-----------------	---------------

#### HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1	Flammability - 1	Physical Hazard - 0	PPE -
------------	------------------	---------------------	-------

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

Reason for Revision: Reviewed and updated for general editorial purposes.

Prepared by the HSE Department of Bayer CropScience Inc. (306)-721-0310.

Revision Date: 02/19/2014

This information is provided in good faith but without express or implied warranty. The customer assumes all

Bayer CropScience



**Safety Data Sheet**

**PROSARO® 250 EC FUNGICIDE**

SDS Number: 102000007908  
SDS Version 1.1

responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.