



## Material Safety Data Sheet

### ROVRAL® GREEN GT FLOWABLE FUNGICIDE

MSDS Number: 102000011863

MSDS Version 2.1

Revision Date: 01/31/2008

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

**Product Name** ROVRAL® GREEN GT FLOWABLE FUNGICIDE  
**MSDS Number** 102000011863  
**PCP Registration No.** 24379

Bayer CropScience Inc  
 #100 - 3131 - 114th Avenue SE  
 Calgary, AB T2Z 3X2  
 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. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Iprodione	36734-19-7	23.30

#### SECTION 3. HAZARDS IDENTIFICATION

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

**Emergency Overview** Caution! May be fatal if inhaled. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

**Physical State** liquid

**Odor** odourless

**Appearance** green

**Routes of Exposure** Inhalation, Ingestion, Eye contact, Skin contact

**Immediate Effects**

**Eye** May cause eye irritation. May cause redness, tearing. Avoid contact with eyes.

**Skin** May cause mild irritation to the skin. Avoid contact with skin and clothing.

**Ingestion** May be harmful if swallowed. May produce symptoms similar to those from inhalation. Do not take internally.

**Inhalation** May be fatal if inhaled. May cause upper respiratory tract irritation, dizziness, headache, nausea, vomiting. Do not breathe vapours or spray mist.



**Material Safety Data Sheet**

**ROVRAL® GREEN GT FLOWABLE FUNGICIDE**

MSDS Number: 102000011863  
MSDS Version 2.1

**Chronic or Delayed Long-Term** This product or its components may have target organ effects.

**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>	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>	> 93.3 °C / > 199.9 °F
<b>Autoignition Temperature</b>	no data available
<b>Lower Flammability Limit</b>	not applicable
<b>Upper Flammability Limit</b>	not applicable
<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO2), Dry chemical, Foam, Water spray



**Material Safety Data Sheet**

**ROVRAL® GREEN GT FLOWABLE FUNGICIDE**

MSDS Number: 102000011863  
MSDS Version 2.1

**Fire Fighting Instructions**

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**

**Personal Precautions**

Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

**Methods for Cleaning Up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

**Additional Advice**

Use personal protective equipment. Do not allow product to contact vegetation. Do not allow to enter soil, waterways or waste water canal.

**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.

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

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

**General Protection**

Follow all label instructions. Train employees in safe use of the product.

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**

Goggles

**Hand Protection**

Chemical resistant nitrile rubber gloves



**Material Safety Data Sheet**

**ROVRAL® GREEN GT FLOWABLE FUNGICIDE**

MSDS Number: 102000011863  
MSDS Version 2.1

**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 appropriate regulatory standards and/or industry recommendations.

**Exposure Limits**

Iprodione	36734-19-7	OES BCS*	2 mg/m3
-----------	------------	----------	---------

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

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	green
<b>Physical State</b>	liquid
<b>Odor</b>	odourless
<b>pH</b>	6.0 - 6.5 (100 %) at 20 °C
<b>Vapor Pressure</b>	no data available
<b>Specific Gravity</b>	no data available
<b>Density</b>	approx. 1.03 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>Partition coefficient: n-octanol/water</b>	no data available

**SECTION 10. STABILITY AND REACTIVITY**

<b>Incompatibility</b>	Acids Bases Oxidizing agents
<b>Hazardous Decomposition Products</b>	Carbon dioxide (CO <sub>2</sub> ) Carbon monoxide Sodium oxides



## Material Safety Data Sheet

### ROVRAL® GREEN GT FLOWABLE FUNGICIDE

MSDS Number: 102000011863  
MSDS Version 2.1

Sulphur oxides

**Hazardous Reactions** Stable under recommended storage conditions.

#### SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity studies have been bridged from a similar formulation containing a similar percentage of the active ingredient, iprodione. The non-acute information pertains to the technical-grade active ingredient.

**Acute Oral Toxicity** male rat: LD50: > 5,000 mg/kg

female rat: LD50: 4,619 mg/kg

**Acute Dermal Toxicity** male/female combined rat: LD50: > 2,000 mg/kg

**Acute Inhalation Toxicity** male/female combined rat: LC50: > 0.8 mg/l  
Exposure time: 4 h  
Determined in the form of a respirable aerosol.  
(actual)  
Highest attainable concentration.  
No deaths

male/female combined rat: LC50: > 3.2 mg/l  
Exposure time: 1 h  
Determined in the form of a respirable aerosol.  
Extrapolated from the 4 hr LC50.  
(actual)

**Skin Irritation** rabbit: Slight irritation.

**Eye Irritation** rabbit: Minimally irritating.

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

**Chronic Toxicity** Iprodione caused effects in the liver, adrenal, ovary and/or testes in chronic feeding studies in rats and dogs.

#### Assessment Carcinogenicity

Iprodione produced benign testicular tumors in rats and benign liver and ovary tumors in mice when tested at a maximum tolerated dose.

#### ACGIH

None.

#### NTP

None.

#### IARC

None.

#### OSHA

None.



**Material Safety Data Sheet**

**ROVRAL® GREEN GT FLOWABLE FUNGICIDE**

MSDS Number: 10200011863  
MSDS Version 2.1

**Reproductive & Developmental Toxicity**

REPRODUCTION: Iprodione did not cause reproductive toxicity in multi-generation studies in rats.

DEVELOPMENTAL TOXICITY: Iprodione was not a primary developmental toxicant as only minor delays or variations in fetal development were observed only at doses that caused maternal toxicity.

**Neurotoxicity**

Iprodione is not considered to be a neurotoxicant.

**Mutagenicity**

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

**SECTION 12. ECOLOGICAL INFORMATION**

**Environmental Precautions**

Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label. Do not allow to get into surface water, drains and ground water. 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 apply when weather conditions favor runoff or drift.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**General Disposal Guidance**

Dispose in accordance with all local, state/provincial and federal regulations.

**Container Disposal**

Triple rinse containers. Add washings to sprayer at time of filling. Puncture container to avoid re-use. Follow advice on product label and/or leaflet.

**SECTION 14. TRANSPORT INFORMATION**

TDG (Canada):  
Not regulated for road or rail.

**SECTION 15. REGULATORY INFORMATION**

PCP Registration No. 24379

**US Federal Regulations**

**TSCA list**

None.

**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**



**Material Safety Data Sheet**

**ROVRAL® GREEN GT FLOWABLE FUNGICIDE**

MSDS Number: 102000011863  
MSDS Version 2.1

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.

**SECTION 16. OTHER INFORMATION**

NFPA 704 (National Fire Protection Association):

Health - 2      Flammability - 1      Reactivity - 1      Others - none

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

Reason to Revise: Updated for general editorial purposes.

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

Revision Date: 01/31/2008

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.