SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: BAYER ADVANCED FUNGUS CONTROL FOR LAWNs READY-TO-SPREAD GRANULES II

MSDS Number: 102000019484

EPA Registration No.: 72155-81

Bayer Environmental Science
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: 1-800-331-2867

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS-No.</th>
<th>Average % by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propiconazole</td>
<td>60207-90-1</td>
<td>0.51</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>1317-65-3</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview: Caution! Hazard to humans and domestic animals. Harmful if swallowed, inhaled or absorbed through the skin. Moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid breathing dust. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

Physical State: granular

Appearance: grey to tan

Routes of Exposure: Inhalation, Skin contact, Skin Absorption, Eye contact

Immediate Effects:
- **Eye**: Causes eye irritation. Do not get in eyes.
- **Skin**: Harmful if absorbed through skin. May cause slight irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
- **Ingestion**: Harmful if swallowed. Do not take internally.
- **Inhalation**: Harmful if inhaled. Avoid breathing dust.
Chronic or Delayed Long-Term

This product or its components may have target organ effects.

Potential Environmental Effect

Toxic to fish.

SECTION 4. FIRST AID MEASURES

General

When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

Eye

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.

Skin

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.

Ingestion

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.

Inhalation

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.

Notes to Physician Treatment

There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5. FIRE FIGHTING MEASURES

Flash point

not applicable

Suitable Extinguishing Media

Water spray, Foam, Carbon dioxide (CO2), Dry chemical

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 water to come into direct contact with the product.

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Methods for Cleaning Up
Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional Advice
Use personal protective equipment. 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.

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.

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

Remove contaminated clothing immediately and dispose of safely. Wash thoroughly and put on clean clothing.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash thoroughly and put on clean clothing.

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
Tightly fitting safety goggles

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 appropriate regulatory standards and/or industry recommendations.

Exposure Limits

<table>
<thead>
<tr>
<th>Substance</th>
<th>NIOSH REL</th>
<th>NIOSH PEL</th>
<th>OSHA Z1 REL</th>
<th>OSHA Z1 PEL</th>
<th>OSHA Z1A TWA</th>
<th>OSHA Z1A PEL</th>
<th>TX ESL ST ESL</th>
<th>TX ESL AN ESL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate</td>
<td>1317-65-3</td>
<td>5 mg/m3</td>
<td>10 mg/m3</td>
<td>5 mg/m3</td>
<td>15 mg/m3</td>
<td>5 mg/m3</td>
<td>50 ug/m3</td>
<td>5 ug/m3</td>
</tr>
</tbody>
</table>

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**: grey to tan
- **Physical State**: granular
- **pH**: approx. 6 - 8 (5 %)
- **Bulk Density**: approx. 29 - 35 lb/ft³

SECTION 10. STABILITY AND REACTIVITY

- **Hazardous Reactions**: No hazardous reactions when stored and handled according to prescribed instructions. Stable under recommended storage conditions.

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 ingredient, propiconazole.

- **Acute Oral Toxicity**: female rat: LD50: > 5,000 mg/kg
- **Acute Dermal Toxicity**: rat: LD50: > 5,000 mg/kg
Acute Inhalation Toxicity  
rat: LC50: > 2.5 mg/l  
Exposure time: 4 h  
Determined in the form of dust.

rat: LC50: > 110 mg/l  
Exposure time: 1 h  
Determined in the form of dust.  
Extrapolated from the 4 hr LC50.

Skin Irritation  
rabbit: Slight irritation.

Eye Irritation  
rabbit: Mild eye irritation.

Sensitization  
guinea pig: Non-sensitizing.

Chronic Toxicity  
Propiconazole caused liver effects and/or stomach irritations in chronic studies in rodents and dogs.

Assessment Carcinogenicity  
Propiconazole has been classified as a Group C (possible human carcinogen) chemical based on liver tumors in male mice. In lifetime feeding studies, propiconazole was not carcinogenic to rats or to female mice.

ACGIH  
None.

NTP  
None.

IARC  
None.

OSHA  
None.

Reproductive & Developmental Toxicity  
REPRODUCTION: Propiconazole was not considered a primary reproductive toxicant in a two-generation study in rats.

DEVELOPMENTAL TOXICITY: Propiconazole is considered a developmental toxicant based on developmental toxicity studies in rats.

Neurotoxicity  
Propiconazole caused minimal neurobehavioral effects without correlating neuropathological changes in neurotoxicity studies in rats.

Mutagenicity  
Propiconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Environmental Precautions
Do not allow to get into surface water, drains and ground water. 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.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance
Dispose in accordance with all local, state/provincial and federal regulations. Never place unused product down any indoor or outdoor drain. Follow advice on product label and/or leaflet.

Container Disposal
Do not re-use empty containers. Follow advice on product label and/or leaflet.

SECTION 14. TRANSPORT INFORMATION

DOT CLASSIFICATION:
Not regulated for any mode of transportation

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

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 72155-81

US Federal Regulations
TSCA list
Calcium carbonate 1317-65-3

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
Propiconazole 60207-90-1 1.0%

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
Propiconazole 60207-90-1 NJ
Calcium carbonate 1317-65-3 MN, RI
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 - 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: 04/11/2008

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