

Syngenta Crop Protection, Inc.
Post Office Box 18300
Greensboro, NC 27419

In Case of Emergency, Call
1-800-888-8372

1. PRODUCT IDENTIFICATION

Product Name: **BANNER GL** Product No.: A8969C
 EPA Signal Word: Warning
 Active Ingredient(%): Propiconazole (41.8%) CAS No.: 60207-90-1
 Chemical Name: 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole
 Chemical Class: Triazole Derivative Fungicide
 EPA Registration Number(s): 100-736 **Section(s) Revised: 2, 3, 5, 12, 15, 16**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
n-Butanol (<= 41%)	100 ppm TWA	20 ppm TWA	50 ppm (Ceiling) (skin)**	No
Propiconazole (41.8%)	Not Established	Not Established	10 mg/m ³ TWA ***	No

** recommended by NIOSH

*** Syngenta Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.
 Syngenta Hazard Category: B

3. HAZARDS IDENTIFICATION
Symptoms of Acute Exposure

Causes eye, skin and respiratory passage irritation.

Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Dark blue to dark blue-green liquid (gel)

Odor: Strong solvent

Unusual Fire, Explosion and Reactivity Hazards

Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so

after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method): 106°F (Setaflash CC)

Flammable Limits (% in Air): Lower: % Not Applicable Upper: % Not Applicable

Autoignition Temperature: Not Available

Flammability: Combustible liquid

Unusual Fire, Explosion and Reactivity Hazards

Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire

Use appropriate extinguishing media for combustibles in the area. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Warning - flammable vapors may be present. Eliminate sources of ignition and ventilate spill area. Use non-sparking clean-up equipment to prevent vapor ignition.

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8.

Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

- Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
- Eye Contact: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.
- Inhalation: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Dark blue to dark blue-green liquid (gel)
- Odor: Strong solvent
- Melting Point: Not Applicable
- Boiling Point: Not Available
- Specific Gravity/Density: 1.03 g/ml @ 68°F (20°C)
- pH: 4 - 7 (1% solution in H₂O)

Solubility in H₂O

- Propiconazole: 0.1 g/l @ 68°F (20°C)

Vapor Pressure

- Propiconazole: 4.2 x 10⁽⁻⁷⁾ mmHg @ 77°F (25°C)

10. STABILITY AND REACTIVITY

- Stability: Stable under normal use and storage conditions.
- Hazardous Polymerization: Will not occur.
- Conditions to Avoid: None known.
- Materials to Avoid: None known.
- Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

- Ingestion: Slightly Toxic
Oral (LD50 Rat) : 2,750 mg/kg body weight
- Dermal: Slightly Toxic
Dermal (LD50 Rabbit) : > 2,020 mg/kg body weight
- Inhalation: Slightly Toxic
Inhalation (LC50 Rat) : > 2.5 mg/l air - 4 hours
- Eye Contact: Moderately Irritating (Rabbit)
- Skin Contact: Moderately Irritating (Rabbit)
- Skin Sensitization: Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects

- Propiconazole: None observed.

Chronic/Subchronic Toxicity Studies

- Propiconazole: None observed.

Carcinogenicity

Propiconazole: Increased incidence of liver tumors at extremely high doses (male mice).

Other Toxicity Information

None

Toxicity of Other Components

n-Butanol (<= 41%)

Prolonged exposure to n-Butanol may result in drying and cracking of the skin from a defatting action. There is evidence that long-term repeated exposure to vapor concentrations greater than 50 ppm may result in some loss of hearing. N-Butanol vapor can cause specific injury to the cornea. Irritation of the skin and respiratory tract may occur with brief exposures. Causes severe irritation to the eyes with lacrimation. Inhalation of n-Butanol may result in loss of consciousness, headache, dizziness, nausea, drowsiness and vomiting.

Target Organs

Active Ingredients

Propiconazole: Liver

Inert Ingredients

n-Butanol : Respiratory tract, inner ear, eye, skin

12. ECOLOGICAL INFORMATION

Summary of Effects

Propiconazole:

Moderately toxic to fish and invertebrates. Practically non-toxic to birds and bees.

Eco-Acute Toxicity

Propiconazole:

Bees LC50/EC50 > 25 ug/bee

Invertebrates (Water Flea) LC50/EC50 3.2 - 10.2 ppm

Fish (Trout) LC50/EC50 4.3 ppm

Fish (Bluegill) LC50/EC50 5.7 - 6.4 ppm

Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,620 ppm

Birds (8-day dietary - Mallard Duck) LC50/EC50 > 5,620 ppm

Eco-Chronic Toxicity

Propiconazole:

Fish (Fathead minnow) Early Life Stage MATC > 0.43 and < 0.97 mg/l

Invertebrate (Daphnia Magna) Life Cycle MATC > 0.31 and < 0.69 mg/l

Mallard Reproduction NOEC 300 ppm

Bobwhite Reproduction NOEC 1,000 ppm

Environmental Fate

Propiconazole:

The information presented here is for the active ingredient, propiconazole.

Low bioaccumulation potential. Not persistent in soil. Stable in water. Low mobility in soil. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Ignitable D001

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Flammable Liquid, n.o.s. (contains n-Butanol), 3, UN1993, PGIII, LTD QTY

B/L Freight Classification

Fungicides, NOI, O/T poison

Comments

None

15. REGULATORY INFORMATION

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard
Fire Hazard

Section 313 Toxic Chemicals: Propiconazole (41.8%) (CAS No. 60207-90-1)
n-Butanol (<= 41%) (CAS No. 71-36-3)

California Proposition 65

Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)

Report product spills > 1,400 gal. (based on n-butanol [RQ = 5,000 lbs.] content in the formulation)

RCRA Hazardous Waste Classification (40 CFR 261)

Ignitable D001

TSCA Status

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 2
Instability: 0

HMIS Hazard Ratings

Health: 1
Flammability: 2
Reactivity: 0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 04/07/1992

Revision Date: 05/17/2004

Replaces: 10/02/2002

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

RSVP# : SCP-955-736A-00104L

End of MSDS