



Material Safety Data Sheet

**BAYER ADVANCED DUAL PROTECTION AZALEA,
CAMELLIA & RHODODENDRON INSECT & DISEASE
CONTROL CONCENTRATE**

MSDS Number: 102000013610
MSDS Version 1.0
Revision Date: 10/18/2005

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name BAYER ADVANCED DUAL PROTECTION AZALEA, CAMELLIA & RHODODENDRON INSECT & DISEASE CONTROL CONCENTRATE
MSDS Number 102000013610
EPA Registration No. 72155-61

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

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Tebuconazole	107534-96-3	1.00
Imidacloprid	138261-41-3	0.20

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution! Avoid contact with skin, eyes and clothing. Moderate eye irritation.

Physical State liquid

Appearance off-white

Routes of Exposure Eye contact, Skin contact, Ingestion

Immediate Effects

Eye Moderate eye irritation. Do not get in eyes.

Skin May cause slight irritation. Avoid contact with skin and clothing.

SECTION 4. FIRST AID MEASURES

General Have the product container or label with you when calling a poison control center or doctor or going for treatment.



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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 poison control center or doctor for treatment advice.
Skin	Take off all contaminated clothing immediately. Rinse immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. 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 poison control center or doctor for further treatment advice.
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	> 93.3 °C / 199.9 °F
Suitable Extinguishing Media	water spray, foam, carbon dioxide (CO2), dry chemical
Fire Fighting Instructions	<p>Keep out of smoke. Fight fire from upwind position. Dike area to prevent runoff and contamination of water sources. Cool closed containers exposed to fire with water spray. Equipment or materials involved in pesticide fires may become contaminated.</p> <p>Wear self contained breathing apparatus for fire fighting if necessary. Wear full protective suit.</p>

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
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Methods for Cleaning Up Take up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material). 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 material to enter streams, sewers, or other waterways.

SECTION 7. HANDLING AND STORAGE

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.

Do not freeze.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection There are no known hazards associated with this product when used according to the label directions. At the same time, the following guidelines should be used.

Avoid inhalation of vapour or mist. Avoid contact with skin and eyes.

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Do not allow children and pets to enter the treated area until it has dried.

Body Protection Wear long-sleeved shirt and long pants, shoes and socks, and chemical resistant gloves (such as or made out of any waterproof material: selection category A).

Exposure Limits Glycerine	56-81-5	ACGIH	TWA	10 mg/m3
		Form of Exposure	Mist.	
		OSHA Z1	PEL	5 mg/m3
		Form of Exposure	Respirable fraction.	
		OSHA Z1	PEL	15 mg/m3
		Form of Exposure	Total dust.	
		OSHA Z1A	TWA	5 mg/m3
		Form of Exposure	Respirable fraction.	
		OSHA Z1A	TWA	10 mg/m3
Form of Exposure	Total dust.			
US CA OEL	TWA PEL	5 mg/m3		
Form of Exposure	Respirable fraction.			



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US CA OEL TWA PEL 10 mg/m3
Form of Exposure Total dust.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance off-white
Physical State liquid
pH >= 6.0 (100 %) at 20 °C
Density ca. 1.024 g/cm³ at 20 °C

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability Stable

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity studies have been bridged from a similar formulation containing the active ingredients, tebuconazole and imidacloprid. The non-acute information pertains to the technical-grade active ingredients.

Acute Oral Toxicity male/female rat: LD50: > 5,000 mg/kg
Acute Dermal Toxicity male/female rat: LD50: > 5,000 mg/kg
Acute Inhalation Toxicity male/female rat: LC50: > 2.8 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
(actual)
Maximum attainable concentration.
No deaths

male/female rat: LC50: > 11.2 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
Extrapolated from the 4 hr LC50.
(actual)
Skin Irritation rabbit: Slight irritation.
Eye Irritation rabbit: Mild eye irritation.
Sensitization guinea pig: non-sensitizing.



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Chronic Toxicity Tebuconazole caused liver, spleen, adrenal and/or eye effects at high doses in chronic studies in rats and dogs.

Imidacloprid caused liver and/or thyroid effects in chronic studies in rats and dogs.

Assessment Carcinogenicity

Tebuconazole is classified by EPA as a Group C carcinogen (possible human carcinogen) based on liver tumors in mice and no evidence of carcinogenicity in rats. As the liver tumors were seen only at a dose exceeding a Maximum Tolerated Dose (MTD), no significant carcinogenic risk is posed for human exposure.

Imidacloprid was not considered carcinogenic in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

**Reproductive &
Developmental Toxicity**

REPRODUCTION: Tebuconazole and imidacloprid are not considered primary reproductive toxicants in rats. Reproductive effects (e.g., decreased pup body weights) were observed at the highest concentration but were considered secondary to maternal toxicity.

DEVELOPMENTAL TOXICITY: Tebuconazole and imidacloprid are not considered primary developmental toxicants in laboratory animals. Developmental effects were observed only at doses that caused maternal toxicity.

Neurotoxicity

Tebuconazole and imidacloprid caused only transient neurobehavioral effects (e.g., decreased motor activity) in acute, subchronic and/or developmental neurotoxicity studies in rats.

Mutagenicity

Based on the overall weight of evidence, neither tebuconazole nor imidacloprid were genotoxic in a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION



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Environmental Precautions Highly toxic to aquatic invertebrates. Do not apply directly to water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance 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 any applicable state or local guidelines. Never place unused product down any indoor or outdoor drain. Refer to the product label for other disposal instructions.

Container Disposal Do not re-use empty containers. Place empty container in trash.

SECTION 14. TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION:
Not regulated for shipment by any mode of transportation

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

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 72155-61

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

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.



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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 - 1 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: 10/18/2005

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