



Material Safety Data Sheet
DELTAGARD® G INSECTICIDE GRANULE

MSDS Number: 102000003168
 MSDS Version 2.0
 Revision Date: 03/17/2006

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name DELTAGARD® G INSECTICIDE GRANULE
MSDS Number 102000003168
EPA Registration No. 432-836

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>
Deltamethrin	52918-63-5	0.10

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution! Harmful if swallowed. Moderate eye irritation. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

Physical State granular solid
Odor slight musty
Appearance tan
Routes of Exposure Ingestion, Eye contact, Skin contact
Immediate Effects
Eye Moderate eye irritation. Avoid contact with eyes.
Skin Did not cause sensitization on laboratory animals.
Ingestion Harmful if swallowed.

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.



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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 physician or poison control center immediately.
Skin	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.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small gulps 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	carbon dioxide (CO2), dry chemical, foam, water
Fire Fighting Instructions	Keep unnecessary people away, isolate hazard area and deny entry. Dike area to prevent runoff and contamination of water sources. Keep out of smoke. Fight fire from upwind position. Equipment or materials involved in pesticide fires may become contaminated. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. 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. Remove all sources of ignition. Refer to protective measures listed in sections 7 and 8.
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Methods for Cleaning Up Sweep up and shovel into suitable containers for disposal. Any disposal practice must be in compliance with all Federal, State/provincial, and local laws and regulations. Clean contaminated floors and objects thoroughly, observing environmental regulations. Decontaminate tools and equipment following cleanup.

Additional Advice Take all necessary action to prevent and to remedy the effects of the spill. Contaminated soil may have to be removed and disposed. Do not allow product to contact vegetation. Do not allow product to enter streams, sewers or other waterways. Extremely toxic to fish and aquatic invertebrates. Contact Bayer for further assistance if necessary.

SECTION 7. HANDLING AND STORAGE

Handling Procedures Handle and open container in a manner as to prevent spillage.

Storing Procedures Store in original container in a secured, dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not contaminate water, food, or feed by storage or disposal.

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 clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection 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.

Engineering Controls Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Eye/Face Protection protective eyewear

Hand Protection Wear suitable 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



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appropriate regulatory standards and/or Industry recommendations.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	tan
Physical State	granular solid
Odor	slight musty
Bulk Density	52.3 lb/ft ³ - Fluffed 61.2 lb/ft ³ - Compacted

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Incompatibility	strong oxidizing agents bases chlorates nitrates
Hazardous Decomposition Products	Carbon monoxide
Hazardous Reactions	No hazardous reactions when stored and handled according to prescribed instructions.

SECTION 11. TOXICOLOGICAL INFORMATION

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

Acute Oral Toxicity	rat: LD50: 2,613 mg/kg
Acute Dermal Toxicity	rabbit: LD50: > 5,000 mg/kg
Skin Irritation	rabbit: No skin irritation.
Eye Irritation	rabbit: Moderate eye irritation.
Sensitization	guinea pig: Non-sensitizing.
Chronic Toxicity	Long-term exposure to deltamethrin caused neurobehavioral effects (e.g., tremors) in chronic toxicity studies in rats and dogs.



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Assessment Carcinogenicity

Deltamethrin was not carcinogenic in oncogenicity studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

Deltamethrin

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Overall evaluation: 3

OSHA

None.

Reproductive & Developmental Toxicity

REPRODUCTION: Deltamethrin was not a reproductive toxicant in multi-generation reproduction studies in rats.

DEVELOPMENTAL TOXICITY: Deltamethrin was not a primary developmental toxicant in developmental toxicity studies in rats and rabbits. Developmental effects (e.g., delayed ossifications) were observed in rabbits at the high-dose but were considered secondary to maternal toxicity.

Neurotoxicity

Deltamethrin did not cause delayed neurotoxicity in hens. In acute and subchronic neurotoxicity screening studies in rats, neurobehavioral effects (e.g., tremors) were observed without correlating neuropathological changes.

Mutagenicity

Deltamethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo mutagenicity studies.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

Extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Use with care when applying in areas adjacent to any body of water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.



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SECTION 13. DISPOSAL CONSIDERATIONS

- General Disposal Guidance** Do not contaminate water, food, or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
- Container Disposal** Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. Dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION

- TRANSPORTATION CLASSIFICATION:**
Not regulated for Domestic Surface Shipment
- FREIGHT TRANSPORTATION:**
Insecticides or Fungicides, N.O.I., other than poison

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 432-836

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.

Canadian Regulations

Canadian Domestic Substance List

None.



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Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Deltamethrin

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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 re-numbering system and sections updated.

Revision Date: 03/17/2006

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