



## DELTAGARD® G INSECTICIDE GRANULE

Version 2.0 / USA  
102000015309

1/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### Product identifier

**Trade name** DELTAGARD® G INSECTICIDE GRANULE  
**Product code (UVP)** 79020090  
**SDS Number** 102000015309  
**EPA Registration No.** 432-836

#### Relevant identified uses of the substance or mixture and uses advised against

**Use** Insecticide  
**Restrictions on use** See product label for restrictions.

#### Information on manufacturer

Bayer Environmental Science  
2 T.W. Alexander Drive  
Research Triangle PK, NC 27709  
United States

#### Emergency telephone no.

**Emergency Telephone Number (24hr/ 7 days)** 1-800-334-7577

#### Product Information Telephone Number

**SDS Information or Request** SDSINFO.BCS-NA@bayer.com

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification in accordance with regulation HCS 29CFR §1910.1200

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

#### Other hazards

No particular hazards known.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Deltamethrin	52918-63-5	0.10



## DELTAGARD® G INSECTICIDE GRANULE

Version 2.0 / USA  
102000015309

2/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

### SECTION 4: FIRST AID MEASURES

#### Description of first aid measures

<b>General advice</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<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>Skin contact</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>Eye contact</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>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.

#### Most important symptoms and effects, both acute and delayed

**Symptoms** To date no symptoms are known.

#### Indication of any immediate medical attention and special treatment needed

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

### SECTION 5: FIREFIGHTING MEASURES

#### Extinguishing media

**Suitable** Carbon dioxide (CO<sub>2</sub>), Dry chemical, Foam, Water

**Unsuitable** None known.

**Special hazards arising from the substance or mixture** Dangerous gases are evolved in the event of a fire.

#### Advice for firefighters

**Special protective equipment for fire-fighters** Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

**Further information** Keep out of smoke. Fight fire from upwind position. Evacuate personnel to safe areas. Do not allow run-off from fire fighting to enter drains or water courses.

**Flash point** not applicable



## DELTAGARD® G INSECTICIDE GRANULE

Version 2.0 / USA  
102000015309

3/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

---

<b>Autoignition temperature</b>	no data available
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Explosivity</b>	no data available

---

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

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

#### Methods and materials for containment and cleaning up

**Methods for cleaning up** Clean contaminated floors and objects thoroughly, observing environmental regulations. Collect and transfer the product into a properly labelled and tightly closed container. Decontaminate tools and equipment following cleanup. Contaminated soil may have to be removed and disposed.

**Additional advice** Do not allow product to contact non-target plants. Do not allow to enter soil, waterways or waste water canal. Contact Bayer for further assistance if necessary.

**Reference to other sections** Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

---

### SECTION 7: HANDLING AND STORAGE

#### Precautions for safe handling

**Advice on safe handling** Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

**Hygiene measures** Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.  
Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

#### Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers** Store in original container. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed.

---



**DELTAGARD® G INSECTICIDE GRANULE**

Version 2.0 / USA  
102000015309

4/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

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

**Control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Deltamethrin	52918-63-5	0.02 mg/m3 (TWA)		OES BCS*
Calcium sulfate (Inhalable fraction.)	13397-24-5	10 mg/m3 (TWA)	02 2012	ACGIH
Calcium sulfate (Total)	13397-24-5	10 mg/m3 (REL)	2010	NIOSH
Calcium sulfate (Respirable.)	13397-24-5	5 mg/m3 (REL)	2010	NIOSH
Calcium sulfate (Total dust.)	13397-24-5	15 mg/m3 (PEL)	02 2006	OSHA Z1
Calcium sulfate (Respirable fraction.)	13397-24-5	5 mg/m3 (PEL)	02 2006	OSHA Z1
Calcium sulfate (Total dust.)	13397-24-5	15 mg/m3 (TWA)	1989	OSHA Z1A
Calcium sulfate (Respirable fraction.)	13397-24-5	5 mg/m3 (TWA)	1989	OSHA Z1A
Calcium sulfate	13397-24-5	5ug/m3 (AN ESL)	03 2012	TX ESL
Calcium sulfate	13397-24-5	50ug/m3 (ST ESL)	03 2012	TX ESL

No control parameters known.

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

**Exposure controls**

**Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**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.

**Hand protection**

Chemical resistant nitrile rubber gloves

**Eye protection**

Safety glasses with side-shields

**Skin and body protection**

Wear long-sleeved shirt and long pants and shoes plus socks.

**General protective measures**

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.



**DELTAGARD® G INSECTICIDE GRANULE**

Version 2.0 / USA  
102000015309

5/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

---

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	grey to tan
<b>Physical State</b>	granular
<b>Odor</b>	slight
<b>Odour Threshold</b>	no data available
<b>pH</b>	no data available
<b>Vapor Pressure</b>	no data available
<b>Vapor Density (Air = 1)</b>	no data available
<b>Bulk density</b>	55 - 63 lb/ft <sup>3</sup>
<b>Evaporation rate</b>	not applicable
<b>Boiling Point</b>	not applicable
<b>Melting / Freezing Point</b>	not applicable
<b>Water solubility</b>	insoluble
<b>Minimum Ignition Energy</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>Partition coefficient: n-octanol/water</b>	not applicable
<b>Viscosity</b>	not applicable
<b>Flash point</b>	not applicable
<b>Autoignition temperature</b>	no data available
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Explosivity</b>	no data available

---

**SECTION 10: STABILITY AND REACTIVITY**

<b>Reactivity</b>	
<b>Thermal decomposition</b>	no data available
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.



**DELTAGARD® G INSECTICIDE GRANULE**

Version 2.0 / USA  
102000015309

6/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

---

<b>Conditions to avoid</b>	no data available
<b>Incompatible materials</b>	Strong oxidizing agents, Bases, Chlorates, Nitrates
<b>Hazardous decomposition products</b>	No decomposition products expected under normal conditions of use.

---

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Exposure routes** Ingestion, Eye contact, Skin contact

**Immediate Effects**  
**Eye** Moderate eye irritation.

**Ingestion** Harmful if swallowed.

**Information on toxicological effects**

**Acute oral toxicity** LD50 (rat) 2,613 mg/kg

**Acute dermal toxicity** LD50 (rabbit) > 5,000 mg/kg

**Skin irritation** No skin irritation (rabbit)

**Eye irritation** Moderate eye irritation. (rabbit)

**Sensitisation** Non-sensitizing. (guinea pig)

**Assessment repeated dose toxicity**

Deltamethrin caused neurobehavioral effects and/or neuropathological changes in animal studies. The toxic effects of Deltamethrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

**Assessment Mutagenicity**

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

**Assessment Carcinogenicity**

Deltamethrin was not carcinogenic in lifetime feeding studies in rats and mice.

**ACGIH**

None.

**NTP**

None.

**IARC**

Deltamethrin 52918-63-5 Overall evaluation: 3

**OSHA**

None.

**Assessment toxicity to reproduction**



## DELTAGARD® G INSECTICIDE GRANULE

Version 2.0 / USA  
102000015309

7/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

Deltamethrin did not cause reproductive toxicity in a two-generation study in rats.

### Assessment developmental toxicity

Deltamethrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Deltamethrin are related to maternal toxicity.

### Further information

Acute toxicity studies have been bridged from a similar formulation(s).  
The non-acute information pertains to the active ingredient(s).

---

## SECTION 12: ECOLOGICAL INFORMATION

<b>Toxicity to fish</b>	LC50 (Oncorhynchus mykiss (rainbow trout)) 0.00091 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient deltamethrin.
<b>Toxicity to aquatic invertebrates</b>	EC50 (Daphnia magna (Water flea)) 0.00056 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient deltamethrin.
<b>Toxicity to aquatic plants</b>	EC50 (Algae) > 9.1 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient deltamethrin.
<b>Biodegradability</b>	Deltamethrin: ; not rapidly biodegradable
<b>Koc</b>	Deltamethrin: Koc: 10240000
<b>Bioaccumulation</b>	Deltamethrin: Bioconcentration factor (BCF) 1,400; Does not bioaccumulate.
<b>Mobility in soil</b>	Deltamethrin: Immobile in soil
<b>Environmental precautions</b>	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 contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not allow to get into surface water, drains and ground water.

---

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

<b>Product</b>	Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations.
<b>Contaminated packaging</b>	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. If burned, stay out of smoke.



**DELTAGARD® G INSECTICIDE GRANULE**

Version 2.0 / USA  
102000015309

8/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

**RCRA Information**

Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

---

**SECTION 14: TRANSPORT INFORMATION**

**49CFR** Not dangerous goods / not hazardous material

**IMDG**

UN number **3077**  
Class **9**  
Packaging group **III**  
Marine pollutant **YES**  
Proper shipping name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DELTAMETHRIN MIXTURE)**

**IATA**

UN number **3077**  
Class **9**  
Packaging group **III**  
Environm. Hazardous Mark **YES**  
Proper shipping name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DELTAMETHRIN MIXTURE )**

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Freight Classification: **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**





**DELTAGARD® G INSECTICIDE GRANULE**

Version 2.0 / USA  
102000015309

9/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

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.

**International Regulations**

**European Inventory of Existing Commercial Substances (EINECS)**

Deltamethrin 52918-63-5

**EPA/FIFRA Information:**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

**Signal word:** Caution!

**Hazard statements:** Harmful if swallowed.  
Moderate eye irritation.  
Avoid contact with skin, eyes and clothing.  
Wash thoroughly with soap and water after handling.

---

**SECTION 16: OTHER INFORMATION**

**NFPA 704 (National Fire Protection Association):**

Health - 1      Flammability - 1      Instability - 0      Others - none

**HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)**

Health - 1      Flammability - 1      Physical Hazard - 0      PPE -

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



**DELTAGARD® G INSECTICIDE GRANULE**

Version 2.0 / USA  
102000015309

10/10  
Revision Date: 11/10/2014  
Print Date: 01/23/2017

---

**Reason for Revision:** Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

**Revision Date:** 11/10/2014

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.