



## Safety Data Sheet

### MERIT® GRANULAR INSECTICIDE

SDS Number: 102000018463

SDS Version 1.0

Revision Date: 05/20/2014

Print Date: 05/20/2014

## SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<b>Product name</b>	MERIT® GRANULAR INSECTICIDE
<b>SDS Number</b>	102000018463
<b>Product code (UVP)</b>	79231857
<b>PCP Registration No.</b>	25933
<b>Product Use</b>	Insecticide

Bayer CropScience Inc  
 #200, 160 Quarry Park Blvd, SE  
 Calgary, Alberta T2C 3G3  
 Canada

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)  
 For Product Information call: 1-888-283-6847

## SECTION 2. HAZARDS IDENTIFICATION

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

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

<b>Physical State</b>	granular
<b>Odor</b>	characteristic
<b>Appearance</b>	light tan to brown
<b>Exposure routes</b>	Eye contact, Skin Absorption, Inhalation, Ingestion
<b>Immediate Effects</b>	
<b>Eye</b>	Causes eye irritation.
<b>Skin</b>	Harmful if absorbed through skin.
<b>Ingestion</b>	Harmful if swallowed.
<b>Chronic or Delayed Long-Term</b>	This product or its components may have target organ effects.



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**Medical Conditions Aggravated by Exposure** No specific medical conditions are known which may be aggravated by exposure to this product. As with all materials which can cause upper respiratory tract irritation, persons with a history of asthma, emphysema, or hyperreactive airways disease may be more susceptible to overexposure. Pulmonary and respiratory diseases may be aggravated by exposure to respirable crystalline silica.

**Potential Environmental Effect** Highly toxic to aquatic invertebrates.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Imidacloprid	138261-41-3	0.50

**SECTION 4. FIRST AID MEASURES**

<b>General</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye</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>Skin</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>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.
<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>Notes to physician Signs and Symptoms</b>	To date no symptoms are known.
<b>Treatment</b>	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.



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#### SECTION 5. FIRE FIGHTING MEASURES

<b>Flash point</b>	not applicable
<b>Autoignition temperature</b>	no data available
<b>Lower Flammability Limit</b>	not applicable
<b>Upper Flammability Limit</b>	not applicable
<b>Explosiveness</b>	no data available
<b>Fire and Explosion Hazards</b>	Hazardous decomposition products due to incomplete combustion.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	None known.
<b>Fire Fighting Instructions</b>	<p>Keep out of smoke. Fight fire from upwind position. Avoid contact with spilled product or contaminated surfaces. Do not allow water to come into direct contact with the product.</p> <p>Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.</p>
<b>Dust explosion class</b>	no data available

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Isolate hazard area. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.
<b>Methods for cleaning up</b>	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.
<b>Additional advice</b>	Do not allow to enter soil, waterways or waste water canal.

#### SECTION 7. HANDLING AND STORAGE

<b>Handling procedures</b>	Handle and open container in a manner as to prevent spillage. Avoid dust formation. Avoid contact with skin, eyes and clothing. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.
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**Storing Procedures** 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. Store in original container and out of the reach of children, preferably in a locked storage area.

**Work/Hygienic Procedures** Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Smoking, eating and drinking should be prohibited in the application area.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**General Protection** 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

Imidacloprid	138261-41-3	OES BCS*	TWA	0.7 mg/m3
Calcium sulfate	13397-24-5	CAD BC OEL	TWA	10 mg/m3
		CAD BC OEL	STEL	20 mg/m3
		CAD BC OEL	TWA	3 mg/m3

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

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** light tan to brown

**Physical State** granular



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<b>Odor</b>	characteristic
<b>pH</b>	no data available
<b>Vapor Pressure</b>	no data available
<b>Vapor Density (Air = 1)</b>	no data available
<b>Specific Gravity</b>	no data available
<b>Bulk density</b>	56 - 64 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>	no data available
<b>Minimum Ignition Energy</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>Partition coefficient: n-octanol/water</b>	no data available
<b>Viscosity</b>	not applicable

## SECTION 10. STABILITY AND REACTIVITY

<b>Conditions to avoid</b>	Elevated temperatures
<b>Incompatibility</b>	Aluminium Diazomethane
<b>Hazardous Decomposition Products</b>	Thermal decomposition can lead to release of: Sulphur oxides Calcium oxides
<b>Hazardous reactions</b>	No hazardous reactions when stored and handled according to prescribed instructions.
<b>Chemical Stability</b>	Stable under recommended storage conditions.



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#### SECTION 11. TOXICOLOGICAL INFORMATION

Only an acute eye irritation study has been performed on this product as formulated. All other acute toxicity data have been bridged from a similar granular formulation containing a higher percentage of the active ingredient, imidacloprid. The non-acute information pertains to the technical-grade active ingredient.

<b>Acute oral toxicity</b>	male/female combined rat: LD50: > 4,820 mg/kg
<b>Acute dermal toxicity</b>	male/female combined rabbit: LD50: > 2,000 mg/kg
<b>Acute inhalation toxicity</b>	male/female combined rat: LC50: > 5.09 mg/l Exposure time: 4 h Determined in the form of dust. (actual)
	male/female combined rat: LC50: > 20 mg/l Exposure time: 1 h Determined in the form of dust. Extrapolated from the 4 hr LC50. (actual)
<b>Skin irritation</b>	rabbit: No skin irritation
<b>Eye irritation</b>	rabbit: Mild eye irritation.
<b>Sensitisation</b>	guinea pig: Non-sensitizing.
<b>Chronic toxicity</b>	Imidacloprid did not cause specific target organ toxicity in experimental animal studies.

#### Assessment Carcinogenicity

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

#### ACGIH

None.

#### NTP

None.

#### IARC

None.

#### OSHA

None.

<b>Reproductive toxicity</b>	Imidacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Imidacloprid is related to parental toxicity.
<b>Developmental Toxicity</b>	Imidacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity.



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**Mutagenicity** Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

## SECTION 12. ECOLOGICAL INFORMATION

**Toxicity to fish** Rainbow trout (*Oncorhynchus mykiss*)  
LC50: 211 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient imidacloprid.

**Toxicity to aquatic plants** *Desmodemus subspicatus*  
Growth rate  
EC50: > 10 mg/l  
The value mentioned relates to the active ingredient imidacloprid.

**Acute Toxicity to Aquatic Invertebrates** Water flea (*Daphnia magna*)  
EC50: 85 mg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient imidacloprid.

*Chironomus riparius* (non-biting midge)  
LC50: 0.0552 mg/l  
Exposure time: 24 h  
The value mentioned relates to the active ingredient imidacloprid.

**Environmental precautions** 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

**General Disposal Guidance** Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations. Follow advice on product label and/or leaflet.

**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. If burned, stay out of smoke. Follow advice on product label and/or leaflet.

## SECTION 14. TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.



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#### SECTION 15. REGULATORY INFORMATION

**PCP Registration No.** 25933

##### 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.

##### 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      Instability - 1      Others - none

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

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

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

Reason for Revision: New Safety Data Sheet.





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Prepared by the HSE Department of Bayer CropScience Inc. (306)-721-0310.

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