



**Safety Data Sheet**

**MERIT® SOLUPAK® INSECTICIDE 75% WETTABLE POWDER IN WATER SOLUBLE PACKETS**

SDS Number: 102000007120  
 SDS Version 1.4  
 Revision Date: 02/20/2014  
 Print Date: 02/21/2014

**SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

**Product name** MERIT® SOLUPAK® INSECTICIDE 75% WETTABLE POWDER IN WATER SOLUBLE PACKETS  
**SDS Number** 102000007120  
**Product code (UVP)** 04399455  
**PCP Registration No.** 25932  
**Product Use** 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, inhaled or absorbed through the skin. Causes eye irritation. Avoid contact with skin, eyes and clothing. Avoid breathing dust or vapour. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before re-use.

**Physical State** powder  
**Odor** none  
**Appearance** white to light beige  
**Exposure routes** Ingestion, Eye contact, Skin contact, Skin Absorption, Inhalation  
**Immediate Effects**  
**Eye** Causes eye irritation.  
**Skin** Harmful if absorbed through skin.  
**Ingestion** Harmful if swallowed.  
**Inhalation** Harmful if inhaled.



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

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

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Imidacloprid	138261-41-3	75.00

**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</b>	
<b>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.

**SECTION 5. FIRE FIGHTING MEASURES**

<b>Flash point</b>	not applicable
<b>Autoignition temperature</b>	no data available



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<b>Lower Flammability Limit</b>	not applicable
<b>Upper Flammability Limit</b>	not applicable
<b>Explosiveness</b>	no data available
<b>Suitable extinguishing media</b>	Water, Carbon dioxide (CO2), Foam, Dry chemical
<b>Unsuitable extinguishing media</b>	None known.
<b>Fire Fighting Instructions</b>	<p>Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.</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>	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
<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>	Use personal protective equipment.

#### SECTION 7. HANDLING AND STORAGE

<b>Handling procedures</b>	Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.
<b>Storing Procedures</b>	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. Protect from freezing.
<b>Work/Hygienic Procedures</b>	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.



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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.

Contaminated work clothing should not be allowed out of the workplace. Remove contaminated clothing immediately and dispose of safely.

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

<b>General Protection</b>	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.
<b>Eye/Face Protection</b>	Tightly fitting safety goggles
<b>Hand protection</b>	Chemical resistant nitrile rubber gloves
<b>Body Protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>Respiratory protection</b>	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
Sodium aluminium silicate	1344-00-9	CAD BC OEL	TWA	1 mg/m3
		CAD MB OEL	TWA	1 mg/m3
		CAD ON OEL	TWAEV	1 mg/m3

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

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	white to light beige
<b>Physical State</b>	powder
<b>Odor</b>	none
<b>pH</b>	7 (1 %) suspension in water
<b>Vapor Pressure</b>	no data available



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<b>Vapor Density (Air = 1)</b>	no data available
<b>Bulk density</b>	30 lb/ft <sup>3</sup> (bulk density tapped)
<b>Evaporation rate</b>	not applicable
<b>Boiling Point</b>	not applicable
<b>Melting / Freezing Point</b>	not applicable
<b>Water solubility</b>	dispersible
<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>	no data available
<b>Incompatibility</b>	no data available
<b>Hazardous Decomposition Products</b>	Thermal decomposition Hydrogen cyanide (hydrocyanic acid) Carbon monoxide Nitrogen oxides (NO <sub>x</sub> ) Hydrogen chloride (HCl)
<b>Hazardous reactions</b>	No hazardous reactions when stored and handled according to prescribed instructions.
<b>Chemical Stability</b>	Stable under recommended storage conditions.

**SECTION 11. TOXICOLOGICAL INFORMATION**

Only acute toxicity studies have been conducted on this product as formulated. The non-acute information pertains to the active ingredient, imidacloprid.



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<b>Acute oral toxicity</b>	male rat: LD50: 2,591 mg/kg female rat: LD50: 1,858 mg/kg
<b>Acute dermal toxicity</b>	male/female combined rat: LD50: > 2,000 mg/kg
<b>Acute inhalation toxicity</b>	male rat: LC50: 2.65 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. (actual)  female rat: LC50: 2.75 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. (actual)  male rat: LC50: 10.6 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. (actual)  female rat: LC50: 11.0 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. (actual)
<b>Skin irritation</b>	rabbit: Slight irritation
<b>Eye irritation</b>	rabbit: Minimally irritating.
<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.



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<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.
<b>Mutagenicity</b>	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

<b>Toxicity to fish</b>	Rainbow trout ( <i>Oncorhynchus mykiss</i> ) LC50: 211 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient imidacloprid.
<b>Toxicity to aquatic plants</b>	Desmodemus subspicatus Growth rate EC50: > 10 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient imidacloprid.
<b>Acute Toxicity to Aquatic Invertebrates</b>	Water flea ( <i>Daphnia magna</i> ) 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.
<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.  Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.



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**SECTION 13. DISPOSAL CONSIDERATIONS**

**General Disposal Guidance** Do not contaminate water, food, or feed by disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Disposal** Follow advice on product label and/or leaflet. Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION**

**TDG** Not dangerous goods / not hazardous material

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

**IMDG**

UN number **3077**  
 Class **9**  
 Packaging group **III**  
 Marine pollutant **YES**  
 Description of the goods **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE)**

**IATA**

UN number **3077**  
 Class **9**  
 Packaging group **III**  
 Environm. Hazardous Mark **YES**  
 Description of the goods **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID 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**

**PCP Registration No.** 25932  
**US Federal Regulations**  
**TSCA list**  
 None.





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#### **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: Reviewed and updated for general editorial purposes.

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

Revision Date: 02/20/2014

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