



**Material Safety Data Sheet**

**MERIT® 75 WP INSECTICIDE**

MSDS Number: 102000007120

MSDS Version 1.2

Revision Date: 11/07/2005

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

**Product Name** MERIT® 75 WP INSECTICIDE  
**MSDS Number** 102000007120  
**EPA Registration No.** 432-1314  
**Product Use** Insecticide for foliar and systemic insect control in turfgrass (including sod farms), landscape ornamentals, fruit and nut trees, and interior plantscapes.

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>
Imidacloprid	138261-41-3	75.00

**SECTION 3. 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 vapor.

**Physical State** solid powder

**Odor** none

**Appearance** light brown

**Routes of Exposure** Ingestion, Eye contact, Skin contact, Skin Absorption, Inhalation

**Immediate Effects**

**Eye** Causes eye irritation. Avoid contact with eyes.

**Skin** Harmful if absorbed through skin. Avoid contact with skin and clothing.



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**Ingestion** Harmful if swallowed. Do not take internally.  
**Inhalation** Harmful if inhaled. Avoid breathing dust or vapor.

**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.

**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** not applicable

**Suitable Extinguishing Media** water, carbon dioxide (CO2), foam, dry chemical

**Fire Fighting Instructions** Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Dike area to prevent runoff and contamination of water sources. Equipment or materials involved in pesticide fires may become contaminated.

In the event of fire, wear self-contained breathing apparatus.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**



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- Personal Precautions** Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
- Methods for Cleaning Up** 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.
- Additional Advice** Use personal protective equipment. Do not allow material to enter streams, sewers, or other waterways.

**SECTION 7. HANDLING AND STORAGE**

- Handling Procedures** Do not allow children and pets to enter the treated area until it has dried.  
Handle and open container in a manner as to prevent spillage.
- Storing Procedures** Do not freeze.  
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.
- Work/Hygienic Procedures** Wash thoroughly with soap and water after handling.  
Remove and wash contaminated clothing before re-use. Before removing gloves clean them with soap and water. As soon as practical, wash thoroughly and change into clean clothing.  
Wash hands always before eating, drinking, smoking or using the toilet.
- Min/Max Storage Temperatures** 30 day average temperature not to exceed 38°C (100°F).

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

- General Protection** Train employees in safe use of the product. Follow all label instructions.  
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.
- Engineering Controls** Ensure adequate ventilation. Use with local exhaust ventilation.
- Eye/Face Protection** tightly fitting safety goggles
- Hand Protection** Chemical resistant gloves made of waterproof material such as polyethylene or polyvinyl chloride



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<b>Body Protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.			
<b>Respiratory Protection</b>	When respiratory protection is necessary under the conditions of use, wear a respirator approved by the National Institute for Occupational Safety and Health (NIOSH).			
<b>Exposure Limits</b>				
Sodium aluminium silicate	1344-00-9	ACGIH	TWA	2 mg/m3
		Expressed as NIOSH	REL	as Al 2 mg/m3
		Expressed as OSHA Z1A	TWA	as Al 2 mg/m3
		Expressed as US CA OEL	TWA PEL	as Al 2 mg/m3

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	light brown
<b>Physical State</b>	solid powder
<b>Odor</b>	none
<b>pH</b>	7 (1 %) suspension in water
<b>Bulk Density</b>	30 lbs/cu.-ft.
<b>Water Solubility</b>	dispersible

**SECTION 10. STABILITY AND REACTIVITY**

<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Hazardous Decomposition Products</b>	Thermal decomposition hydrogen cyanide (hydrocyanic acid) Carbon monoxide nitrogen oxides (NOx) hydrogen chloride (HCl)

**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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**Acute Oral Toxicity** male rat: LD50: 2,591 mg/kg

female rat: LD50: 1,858 mg/kg

**Acute Dermal Toxicity** male/female rat: LD50: > 2,000 mg/kg

**Acute Inhalation Toxicity** 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)

**Skin Irritation** rabbit: Slight irritation.

**Eye Irritation** rabbit: Mild eye irritation.

**Sensitization** guinea pig: Non-sensitizing.

**Subchronic Toxicity** In a 3-week dermal toxicity study, rabbits treated with imidacloprid showed no local or systemic effects at levels up to and including 1000 mg/Kg, the limit dose.

In a 4-week inhalation study, rats exposed to high concentrations of imidacloprid exhibited decreased body weight gains and changes in clinical chemistries and organ weights.

**Chronic Toxicity** In chronic dietary studies in rats and dogs exposed to imidacloprid, the target organs were the thyroid and/or liver.

**Assessment Carcinogenicity**

In oncogenicity studies in rats and mice, imidacloprid was not considered carcinogenic in either species.

**ACGIH**  
None.  
**NTP**



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None.  
**IARC**  
None.  
**OSHA**  
None.

**Reproductive & Developmental Toxicity**

**REPRODUCTION:** In a two-generation reproduction study in rats, imidacloprid was not a primary reproductive toxicant. Offspring exhibited reduced body weights at the high dose and in conjunction with maternal toxicity.

**DEVELOPMENTAL TOXICITY:** In developmental toxicity studies in rats and rabbits, there was no evidence of an embryonic or teratogenic potential for imidacloprid. In both species, developmental effects were observed only at high doses and in conjunction with maternal toxicity.

**Neurotoxicity**

In acute and subchronic neurotoxicity screening studies in rats, imidacloprid produced slight neurobehavioral effects in each study at the highest dose tested. There were no correlating morphological changes observed in the neural tissues.

**Mutagenicity**

The imidacloprid mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.

**SECTION 12. ECOLOGICAL INFORMATION**

**Environmental Precautions**

Highly toxic to 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. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

**Ecological Information**

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.



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**SECTION 13. DISPOSAL CONSIDERATIONS**

- General Disposal Guidance** Pesticide 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. If burned, stay out of smoke.

**SECTION 14. TRANSPORT INFORMATION**

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

**SECTION 15. REGULATORY INFORMATION**

**EPA Registration No.** 432-1314

**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**



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None.

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

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**SECTION 16. OTHER INFORMATION**

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NFPA 704 (National Fire Protection Association):

Health - 1      Flammability - 1      Reactivity - 1      Others - none

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

Reason to Revise: Updated Active Ingredient percent in Section 2.

Revision Date: 11/07/2005

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