



Material Safety Data Sheet

MERIT 75 WP Insecticide

MSDS Version 2.0

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name	MERIT 75 WP Insecticide
Chemical Name	
Common Name	
MSDS Number	R000015961
Chemical Family	
Chemical Formulation	
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 landscapes.

Bayer Environmental Science
 95 Chestnut Ridge Road
 Montvale, NJ 07645
 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>Concentration % by Weight</u>	
		<u>Minimum</u>	<u>Maximum</u>
Imidacloprid Technical	138261-41-3	72.7000	77.2000
Sodium Aluminum Silicate	1344-00-9		

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution! Hazard to humans and domestic animals. Harmful if swallowed, inhaled or absorbed through the skin. Causes eye irritation. Avoid contact with skin, eyes and clothing. Avoid breathing dust or vapor. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before re-use.

Physical State	Solid Powder
Odor	None
Appearance	Light brown

Material Safety Data Sheet

MSDS Number: R000015961
MSDS Version 2.0

MERIT 75 WP Insecticide

Immediate Effects

Eye	Avoid contact with the eyes. Causes eye irritation.
Skin	Avoid contact with skin, eyes and clothing. Harmful if absorbed through skin.
Ingestion	Harmful if swallowed.
Inhalation	Avoid breathing dust or spray mist. Harmful if inhaled.

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. In case of poisoning, call the Medical Emergency Telephone Number on page 1.
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	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a poison control center or doctor for treatment advice.
Ingestion	Never give anything by mouth to an unconscious person. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Have person sip a glass of water if able to swallow. Call a poison control center or doctor immediately for treatment advice.
Notes to physician	
Treatment	Treat symptomatically. There is no antidote.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	> 93.3 °C / > 199.9 °F
Suitable Extinguishing Media	Water, Carbon dioxide (CO ₂), Foam, Dry chemical
Fire Fighting Instructions	In the event of fire, wear self-contained breathing apparatus. 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. Cool closed containers exposed to fire with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal	Use proper protective equipment to minimize personal exposure (see Section 8). Sweep up spilled material. Place in a container for disposal.
Land Spill or Leaks	Isolate area and keep unauthorized people away. Avoid dust formation. Avoid breathing dust. Avoid contact with skin. Use recommended protective equipment while carefully sweeping up spilled material. Place in an approved chemical

Material Safety Data Sheet

MSDS Number: R000015961
MSDS Version 2.0

MERIT 75 WP Insecticide

waste container for disposal.

Scrub contaminated area with soap and water. Rinse with water. Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal. Contaminated soil may have to be removed and disposed. Do not allow material to enter streams, sewers, or other waterways.

SECTION 7. HANDLING AND STORAGE

Storing Procedures Do not contaminate water, food, or feed by storage or handling. 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.

Min/Max Storage Temperatures No minimum storage temperature.
30 day average temperature not to exceed 100°F.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use with local exhaust ventilation. Where engineering controls are indicated by use conditions of a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: When handlers used closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Eye/Face Protection Tightly fitting safety goggles.

Hand Protection Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.

Body Protection Long-sleeved shirt and long pants. Shoes plus socks.

Respiratory Protection When respiratory protection is necessary under the conditions of use, wear a respirator approved for pesticides by the National Institute for Occupational Safety and Health (NIOSH). No personal respiratory protective equipment normally required.

General Protection In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Educate and 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 hot water.

Exposure Limits None Established

Sodium Aluminum Silicate	1344-00-9	ACGIH	TWA	2 mg/m3
		Expressed as	as Al	
		NIOSH	REL	2 mg/m3
		Expressed as	as Al	

Material Safety Data Sheet

MERIT 75 WP Insecticide

MSDS Number: R000015961
MSDS Version 2.0

OSHA Z1A TWA
Expressed as as Al 2 mg/m3

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light brown
Physical State	Solid Powder
Odor	None
pH	6 - 8 Determined as a 1% suspension in distilled water.
Bulk Density	30 lbs/cu.-ft.
Solubility (in water)	Dispersible

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	None known.
Hazardous Products of Decomposition	Proposed compounds due to fire or other extreme conditions: Hydrogen chloride (HCl) Hydrogen cyanide (hydrocyanic acid) Carbon monoxide Nitrogen oxides (NOx)
Hazardous Polymerization (Conditions to avoid)	Will not occur.

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.

Material Safety Data Sheet

MSDS Number: R000015961
MSDS Version 2.0

MERIT 75 WP Insecticide

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: 4-hr exposure to liquid aerosol: 2.65 mg/l (actual) Female Rat: LC50: 4-hr exposure to liquid aerosol: 2.75 mg/l (actual) Male Rat: 1-hr exposure to liquid aerosol (extrapolated from 4-hr LC50): 10.6 mg/l (actual) Female Rat: 1-hr exposure to liquid aerosol (extrapolated from 4-hr LC50): 11.0 mg/l (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 oncongenicity studies in rats and mice, imidacloprid was not considered carcinogenic in either species.
ACGIH	None
NTP	None
IARC	None
OSHA	None
Reproductive & Developmental Toxicity	REPRODUCTIVE: 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 material toxicity. DEVELOPMENTAL: 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.

Material Safety Data Sheet

MERIT 75 WP Insecticide

MSDS Number: R000015961
MSDS Version 2.0

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 of 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. Do not allow material to contaminate ground water system.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance Follow container label instructions for disposal of wastes generated during use in compliance with the product label. In other situations, bury in an approved landfill or burn in an incinerator approved for pesticide destruction.

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 Empty remaining contents. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If burned, stay out of smoke. Then dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning.

RCRA Classification Not Regulated under this Statute

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

TSCA 12b export notification

None

SARA Title III - section 302 - notification and information

None

Material Safety Data Sheet

MSDS Number: R000015961
MSDS Version 2.0

MERIT 75 WP Insecticide

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

International Regulations

EU Classification

None

European Inventory of Existing Commercial Substances (EINECS)

None

SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
NFPA	1	1	1	0

Reason to Issue: Update format; update Section 11; add EPA Registration Number.

Approval Date: 05/24/2004

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