



Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

Chemical Name

Common Name

MSDS Number 2019

Chemical Family

Chemical Formulation

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

Product Use Description Insecticide, for use on: Lawns, Ground Cover, Flower Beds, Around Trees & Shrubs, and Around Homes

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	0.1200	0.1800
Beta-cyfluthrin Technical	68359-37-5	0.0400	0.0600
Wood Dust			

Material Safety Data Sheet

Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

MSDS Number: 000000002019
MSDS Version 1.3

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 moderate eye irritation. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Physical State Solid
Granular

Appearance Brown

Routes of Exposure Ingestion, inhalation and skin contact.

Immediate Effects

Eye Causes moderate eye irritation. Avoid contact with eyes.

Skin Non-irritating.

Ingestion Harmful if swallowed. Do not take internally.

Inhalation Harmful if inhaled. Avoid breathing dust.

SECTION 4. FIRST AID MEASURES

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 Seek medical attention if irritation develops or persists.

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 told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation Move person 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.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point Not applicable

Suitable Extinguishing Water, Foam, Dry chemical

Material Safety Data Sheet

MSDS Number: 000000002019

Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

MSDS Version 1.3

Media

Fire Fighting Instructions

Keep out of smoke. Cool exposed containers with water spray. Wear full protective clothing and self-contained breathing apparatus. Contain runoff to prevent entry into sewers or waterways. Equipment or materials involved in pesticide fires may become contaminated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal

Keep unnecessary people away, isolate hazard area and deny entry. Do not walk through spilled material.

Land Spill or Leaks

Avoid generating dust (a fine water spray mist, plastic film cover, or floor sweeping compound may be used if necessary). Avoid breathing dusts and skin contact. Use recommended protective equipment while carefully sweeping up spilled material. Place in covered container for reuse or 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

Handling Procedures

Food utensils such as teaspoons or measuring cups must not be used for food purposes after use in measuring pesticides.

Storing Procedures

Store in a cool, dry area. Store in original container and out of the reach of children, preferably in a locked storage area.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

General Protection

There are no known hazards associated with this product when used according to the label directions. At the same time, the following guidelines should be used.

Avoid breathing dust.

Avoid contact with skin and eyes.

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Do not allow children or pets on treated area until it has been watered and allowed to dry.

Exposure Limits

Material Safety Data Sheet

Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

MSDS Number: 000000002019
MSDS Version 1.3

Wood Dust	ACGIH	TWA		1 mg/m3
		Form of Exposure	Dust.	
	ACGIH	TWA		5 mg/m3
		Form of Exposure	Dust.	
	ACGIH	STEL		10 mg/m3
		Form of Exposure	Dust.	
	ACGIH NIC	TWA		0.5 mg/m3
		Form of Exposure	Inhalable fraction.	
	ACGIH NIC	TWA		1 mg/m3
		Form of Exposure	Inhalable fraction.	
	NIOSH	REL		1 mg/m3
		Form of Exposure	Dust.	
	OSHA Z1A	TWA		5 mg/m3
		Form of Exposure	Dust.	
	OSHA Z1A	TWA		2.5 mg/m3
		Form of Exposure	Dust.	
	OSHA Z1A	STEL		10 mg/m3
		Form of Exposure	Dust.	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Brown
Physical State	Solid Granular
pH	6.5 - 7.4 at (5% aqueous suspension) at 25 °C

Material Safety Data Sheet

MSDS Number: 000000002019

Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

MSDS Version 1.3

Bulk Density 40 - 60 lb./cu. ft.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability This material is stable under normal handling and storage conditions described in Section 7.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity Male and Female Rat: LD50: > 2,000 mg/kg

Acute Dermal Toxicity Male and Female Rat: LD50: > 4,000 mg/kg

Acute Inhalation Toxicity Male and Female Rat: LC50: 4-hr exposure to liquid aerosol: > 1.2 mg/l Maximum attainable concentration. (actual)

Male and Female Rat: 1-hr exposure to liquid aerosol (extrapolated from 4-hr LC50): > 4.8 mg/l (actual)

Skin Irritation Rabbit: Non-irritating.

Eye Irritation Rabbit: Non-irritating.

Sensitization Guinea pig: Not a dermal sensitizer.

Acute toxicity studies for this product have been bridged from another product containing a higher percentage of the active ingredients Beta-cyfluthrin (1.35%), an enriched isomer mixture of Cyfluthrin and Imidacloprid (10%). The non-acute information pertains to the active ingredients, Beta-cyfluthrin technical, Cyfluthrin technical, and Imidacloprid technical. Toxicology information on Cyfluthrin technical can be obtained by calling the Product Use Information Number on page 1.

Sub-Chronic Toxicity BETA-CYFLUTHRIN TECHNICAL

In a subchronic dietary study, dogs treated with beta-cyfluthrin, exhibited vomiting, diarrhea, decreased body weight gain and clinical neurological symptoms at the highest dose level (360 ppm).

In a subchronic dietary study in rats treated with beta-cyfluthrin, effects included reduced body weight gains and feed consumption, uncoordinated gait, and skin injuries of the neck and head from excessive preening due to the local irritant effect of the test material.

In a 4-week inhalation study in rats exposed to beta-cyfluthrin, effects observed included ungroomed fur, piloerection, hyper- and hypoactivity, reduced body weight gains, hematological changes and reduced organ weights (thymus, spleen).

Material Safety Data Sheet

MSDS Number: 000000002019

Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

MSDS Version 1.3

IMIDACLOPRID TECHNICAL

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

IMIDACLOPRID TECHNICAL

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

Assessment Carcinogenicity

IMIDACLOPRID TECHNICAL

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

ACGIH

Wood Dust

Group A1

NTP

Wood Dust

IARC

Wood Dust

1

OSHA

None

Reproductive & Developmental Toxicity

BETA-CYFLUTHRIN TECHNICAL

DEVELOPMENTAL TOXICITY: In an oral developmental toxicity study in rats treated with beta cyfluthrin, decreased fetal body weights and an increased incidence of skeletal findings were observed at the maternally toxic and lethal high dose level (40 mg/kg).

IMIDACLOPRID TECHNICAL

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

Neurotoxicity

BETA-CYFLUTHRIN TECHNICAL

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

IMIDACLOPRID TECHNICAL

In acute and subchronic neurotoxicity screening studies in rats, imidacloprid

Material Safety Data Sheet

MSDS Number: 000000002019

Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

MSDS Version 1.3

produced slight neurobehavioral effects in each study at the highest dose tested. There were no correlating morphological changes observed in the neural tissues.

In a one-generation developmental neurotoxicity screening study in rats, offspring exposed to imidacloprid showed decreased body weights and motor activities. These effects occurred at the highest dose tested and in conjunction with maternal toxicity. There were no correlating morphological changes observed in the neural tissues.

Mutagenicity

BETA-CYFLUTHRIN TECHNICAL

Numerous in vitro and in vivo mutagenicity studies have been conducted on beta-cyfluthrin, all of which are negative.

IMIDACLOPRID TECHNICAL

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

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

This product is toxic to fish. Do not apply directly to water. Apply this product only as specified on the label. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment washwater.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow any applicable state or local guidelines. Never place unused product down any indoor or outdoor drain.

Container Disposal

Completely empty bag into application equipment. Do not reuse empty bag. Place bag in trash.

RCRA Classification

Not Regulated under this Statute

SECTION 14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not regulated for transportation

FREIGHT CLASSIFICATION:

Insecticide or Fungicides, N.O.I., other than poison

Material Safety Data Sheet

Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

MSDS Number: 000000002019
MSDS Version 1.3

SECTION 15. REGULATORY INFORMATION

US Federal Regulations

TSCA list

None

TSCA 12b export notification

None

SARA Title III - section 302 - notification and information

None

SARA Title III - section 313 - toxic chemical release reporting

Beta-cyfluthrin Technical 68359-37-5 1.0%

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

Beta-cyfluthrin Technical 68359-37-5 US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

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

Material Safety Data Sheet

MSDS Number: 000000002019

Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spread Granules

MSDS Version 1.3

SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
NFPA	1	0	1	

Reason to Issue: Product Name Change; Update component information in Section 2. Composition/Information on Ingredients.

Approval Date: 11/21/2003

This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer AG. Bayer Environmental Science