



## Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spray

### SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product Name** Bayer Advanced Lawn Complete Insect Killer For Soil & Turf Ready-to-Spray  
**Chemical Name**  
**Common Name**  
**MSDS Number** 2018  
**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: Flowers, Roses, Shrubs, Trees

### 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	0.6500	0.7900
Beta-cyfluthrin Technical	68359-37-5	0.3200	0.4000

### SECTION 3. HAZARDS IDENTIFICATION

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

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

**Physical State** Viscous  
Liquid

**Appearance** Tan

# Material Safety Data Sheet

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<b>Routes of Exposure</b>	Ingestion, inhalation and skin contact.
<b>Immediate Effects</b>	
<b>Eye</b>	Causes eye irritation. Avoid contact with eyes.
<b>Skin</b>	Non-irritating.
<b>Ingestion</b>	Harmful if swallowed. Do not take internally.
<b>Inhalation</b>	Harmful if inhaled. Avoid breathing spray mist.

### SECTION 4. FIRST AID MEASURES

<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 poison control center or doctor for treatment advice.
<b>Skin</b>	Seek medical attention if irritation develops or persists.
<b>Ingestion</b>	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.
<b>Inhalation</b>	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

<b>Flash Point</b>	93.3 °C / 199.9 °F
<b>Suitable Extinguishing Media</b>	Water, Foam, Dry chemical
<b>Fire Fighting Instructions</b>	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

<b>General and Disposal</b>	Keep unnecessary people away, isolate hazard area and deny entry. Do not walk through spilled material.
<b>Land Spill or Leaks</b>	Avoid breathing vapors and skin contact. Wear proper protective equipment.

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Dike contaminated area with absorbent granules, soil, sand, etc. Large Spill: Material should be recovered. Small spills can be absorbed with absorbent granules, spill control pads, or any absorbent material. Carefully sweep up absorbed spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with soap and 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 or contact vegetation.

### SECTION 7. HANDLING AND STORAGE

- Handling Procedures** When using in animal quarters, do not apply directly to food, water or food supplements.
- 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.
- Protect product from freezing temperatures.

### 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 vapors and mists.
- 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 and pets to enter the treated area until it has dried.

#### Exposure Limits

None known.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** Tan
- Physical State** Viscous  
Liquid

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<b>pH</b>	7.9 at 25 °C
<b>Specific Gravity</b>	1.034
<b>Bulk Density</b>	8.6 lbs/gal
<b>Viscosity</b>	663 mPa.s

### SECTION 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	This material is stable under normal handling and storage conditions described in Section 7.
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### SECTION 11. TOXICOLOGICAL INFORMATION

<b>Acute Oral Toxicity</b>	Male and Female Rat: LD50: > 2,000 mg/kg
<b>Acute Dermal Toxicity</b>	Male and Female Rat: LD50: > 4,000 mg/kg
<b>Acute Inhalation Toxicity</b>	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)
<b>Skin Irritation</b>	Rabbit: Non-irritating.
<b>Eye Irritation</b>	Rabbit: Non-irritating.
<b>Sensitization</b>	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.

<b>Sub-Chronic Toxicity</b>	<b>BETA-CYFLUTHRIN TECHNICAL</b> 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.
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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).

### 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

None

#### NTP

None

#### IARC

None

#### 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

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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 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 extremely toxic to fish and aquatic invertebrates. Do not apply directly to water. This product is highly toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treated area. 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

Do not reuse empty container. Empty containers should be triple rinsed (or equivalent). Wrap and discard in trash.

### RCRA Classification

Not Regulated under this Statute

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### SECTION 14. TRANSPORT INFORMATION

**DOT CLASSIFICATION:**

Not regulated for transportation

**FREIGHT CLASSIFICATION:**

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

### 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

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**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	

Reason to Issue: Product name change

Approval Date: 11/21/2003

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