



Bayer Advanced Garden Rose & Flower Insect Killer Ready-To-Spray

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name Bayer Advanced Garden Rose & Flower Insect Killer Ready-To-Spray
Chemical Name
Synonym
MSDS Number 2001
Chemical Family
Chemical Formulation
EPA Registration No.
Canadian Registrat. No.

Bayer Environmental Science
 95 Chestnut Ridge Road
 Montvale, NJ 07645
 USA

For Product Use Information: (800)331-2867 Monday through Friday(CRLF) 8:00AM-4:30PM(CRLF) For Medical Emergency contact DART: (800) 334-7577 24 Hours/Day(CRLF) For Transportation Emergency CHEMTREC: (800) 424-9300 24 Hours/Day

Product Use Description Insecticide, for use on: Flowers, Roses, Trees, Shrubs, Lawns and Building Foundations.

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component Name</u>	<u>CAS No.</u>	<u>Concentration % by Weight</u>	
		<u>Minimum</u>	<u>Maximum</u>
Imidacloprid Technical	138261-41-3	0.3200	0.4000
Beta-cyfluthrin Technical	68359-37-5	0.1600	0.2000

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution! Harmful if swallowed or inhaled. Avoid contact with skin, eyes and clothing. Avoid breathing vapors and spray mist. Wash thoroughly with soap and water after handling.

Physical State Viscous, Liquid

Appearance Tan

Material Safety Data Sheet

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

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	> 93.3 °C / > 199.9 °F
Suitable Extinguishing Media	Water, Foam, Dry chemical
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 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. Do not permit children or pets to go on treated areas until spray has dried.
- 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 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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pH	7.9 at 25 °C
Specific Gravity	1.092
Bulk Density	9.098 lbs/gal
Viscosity	576 mPa.s

SECTION 10. STABILITY AND REACTIVITY

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

Acute Oral Toxicity	Male/Female Combined Rat: LD50: > 2,000 mg/kg
Acute Dermal Toxicity	Male/Female Combined Rat: LD50: > 4,000 mg/kg
Acute Inhalation Toxicity	Male/Female Combined Rat: LC50: 4-hr exposure to liquid aerosol: > 1.2 mg/l (actual) Maximum attainable concentration. Male/Female Combined 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.
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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. Do not contaminate water by cleaning of equipment or disposal of equipment wastewaters. 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.

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 container and put in trash collection.

RCRA Classification

Not Regulated under this Statute

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SECTION 14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not regulated for transportation

FREIGHT CLASSIFICATION:

Insecticides or Fungicides, N.O.I.: other than poison

SECTION 15. REGULATORY INFORMATION

US Federal Regulations

EPA Registration No.

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

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 Registrat. No.

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

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EU Classification

None

European Inventory of Existing Commercial Substances (EINECS)

None

SECTION 16. OTHER INFORMATION

NFPA	Health	Flammability	Reactivity	Others
	1	1	1	

MSDS REVISION INDICATOR: New MSDS.

Print Date: 09/22/2003

Supersedes MSDS, which is older than: 09/19/2003

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