



Bayer Advanced Garden PowerForce Kills Bugs Fast Multi-Insect Killer Ready-To-Spray

MSDS Version 1.0

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name Bayer Advanced Garden PowerForce Kills Bugs Fast Multi-Insect Killer Ready-To-Spray

Chemical Name

Synonym

MSDS Number 2037

Chemical Family

Chemical Formulation

EPA Registration No.

Canadian Registrat. No.

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 Covers, Flowers, Shrubs, Trees, 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>
Beta-cyfluthrin Technical	68359-37-5	0.3400	0.4200
Naphthalene	91-20-3		0.0960

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 Low viscosity liquid

Appearance Off-white

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Routes of Exposure	Inhalation and ingestion.
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. Call a physician if irritation persists.
Skin	Seek medical attention if irritation develops or persists.
Ingestion	Have person sip a glass of water if able to swallow. Call a poison control center or doctor for treatment advice.
Inhalation	Move person to fresh air. Call a poison control center or doctor for further treatment advice. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	Not applicable
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. 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

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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 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

Naphthalene	91-20-3	ACGIH	TWA		10 ppm
		ACGIH	STEL		15 ppm
		NIOSH	REL	10 ppm	50 mg/m3
		NIOSH	STEL	15 ppm	75 mg/m3
		OSHA Z1	PEL	10 ppm	50 mg/m3
		OSHA Z1A	TWA	10 ppm	50 mg/m3
		OSHA Z1A	STEL	15 ppm	75 mg/m3
		US CA OEL	TWA PEL	10 ppm	50 mg/m3
		US CA OEL	STEL	15 ppm	75 mg/m3

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Off-white
Physical State	Low viscosity liquid
pH	7.7 - 7.9 at 25 °C
Bulk Density	0.98 - 1.00 g/cc at 20/20°C
Viscosity	2.5 - 3.5 mPa.s 23 °C

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 Rat: LD50: 960 mg/kg Female Rat: LD50: 1,150 mg/kg
Acute Dermal Toxicity	Male/Female Combined Rat: LD50: > 2,000 mg/kg
Acute Inhalation Toxicity	Male/Female Combined Rat: LC50: 4-hr exposure to liquid aerosol: > 1.72 mg/l (actual) Maximum attainable concentration. Male/Female Combined Rat: 1-hr exposure to dust (extrapolated from 4-hr LC50): > 6.88 mg/l (actual)
Skin Irritation	Rabbit: Not a dermal irritant.
Eye Irritation	Rabbit: Mild irritation to the conjunctiva was observed with all irritation clearing within 7 days post-treatment.
Sensitization	Guinea pig: Not a dermal sensitizer.

Acute toxicity studies for this product have been bridged from another product containing ~11.8% of the active ingredient, Beta-cyfluthrin, an enriched isomer mixture of Cyfluthrin. The non-acute information pertains to the active ingredient Beta-cyfluthrin technical. Toxicology information on Cyfluthrin technical can be obtained by calling the Product Use Information Number on page 1.

Sub-Chronic Toxicity	In a subchronic dietary study, dogs treated with beta-cyfluthrin, exhibited vomiting, diarrhea, decreased body weight gain and clinical neurological
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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).

Assessment Carcinogenicity

ACGIH

Naphthalene

91-20-3

Group A4

NTP

Naphthalene

91-20-3

IARC

None

OSHA

None

Reproductive & Developmental Toxicity

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).

Neurotoxicity

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.

Mutagenicity

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

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

This product is toxic to fish. 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.

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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. Triple rinse (or equivalent). Wrap container and put in trash collection.
RCRA Classification	Not Regulated under this Statute

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

Naphthalene 91-20-3

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%

Naphthalene 91-20-3 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

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Naphthalene

91-20-3

372.65) - Supplier Notification
Required
CA, CT, IL, MN, NJ, PA, RI

Canadian Regulations

Canadian Registrat. No.
Canadian Domestic Substance List
Naphthalene

91-20-3

Environmental

CERCLA
Naphthalene 91-20-3
Clean Water Section 307 Priority Pollutants
Naphthalene 91-20-3
Safe Drinking Water Act Maximum Contaminant Levels
Naphthalene 91-20-3

100 lbs

International Regulations

EU Classification

Naphthalene 91-20-3 Harmful Dangerous for the environment

R Phrases Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrases Keep out of the reach of children. Wear suitable protective clothing and gloves. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

European Inventory of Existing Commercial Substances (EINECS)

Naphthalene 91-20-3

SECTION 16. OTHER INFORMATION

NFPA	Health	Flammability	Reactivity	Others
	1	1	1	

MSDS REVISION INDICATOR: New MSDS.

Approval Date: 10/28/2003

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