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

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Bayer Advanced Garden PowerForce Kills Bugs Fast Multi-Insect Killer Ready-To-Spray</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name Synonym</td>
<td></td>
</tr>
<tr>
<td>MSDS Number</td>
<td>2037</td>
</tr>
<tr>
<td>Chemical Family</td>
<td></td>
</tr>
<tr>
<td>Chemical Formulation</td>
<td></td>
</tr>
<tr>
<td>EPA Registration No.</td>
<td></td>
</tr>
<tr>
<td>Canadian Registrat. No.</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS No.</th>
<th>Concentration % by Weight Minimum</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>Beta-cyfluthrin Technical</td>
<td>68359-37-5</td>
<td>0.3400</td>
<td>0.4200</td>
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<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>0.0960</td>
<td></td>
</tr>
</tbody>
</table>

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
Material Safety Data Sheet

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

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
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

<table>
<thead>
<tr>
<th>Naphthalene</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
<th>NIOSH REL</th>
<th>NIOSH STEL</th>
<th>OSHA Z1 PEL</th>
<th>OSHA Z1A TWA</th>
<th>OSHA Z1A STEL</th>
<th>US CA OEL TWA PEL</th>
<th>US CA OEL STEL</th>
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<tbody>
<tr>
<td>91-20-3</td>
<td>10 ppm</td>
<td>15 ppm</td>
<td>10 ppm</td>
<td>15 ppm</td>
<td>10 ppm</td>
<td>10 ppm</td>
<td>15 ppm</td>
<td>10 ppm</td>
<td>15 ppm</td>
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</table>
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.

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
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.
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
Material Safety Data Sheet

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

Naphthalene 91-20-3

Canadian Regulations
Canadian Registrat. No.
Canadian Domestic Substance List
Naphthalene 91-20-3

Environmental
CERCLA
Naphthalene 91-20-3 100 lbs

Clean Water Section 307 Priority Pollutants
Naphthalene 91-20-3

Safe Drinking Water Act Maximum Contaminant Levels
Naphthalene 91-20-3

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

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA</td>
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</tbody>
</table>

MSDS REVISION INDICATOR: New MSDS.

Approval Date: 10/28/2003

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