1. Identification

Product identifier: WISDOM® GC Granular

Other means of identification:

SDS number: 318

Synonym(s):

WISDOM® Nursery Granular Insecticide * WISDOM® Lawn Granular Insecticide * WISDOM® EZ * WISDOM® EZ Golf Course

Recommended use:

Pyrethroid type insecticide/miticide.

Recommended restrictions:

Keep out of the Reach of Children!

EPA Registration number:

EPA: 5481-518; 5481-521; 5481-522

Manufacturer/Importer/Supplier/Distributor information

Manufacturer:

Company name: AMVAC Chemical Corporation
Address: 4100 E Washington Blvd
Los Angeles, CA 90023 USA

Telephone:

AMVAC Chemical Corp 323-264-3910
AMVAC Chemical Corp 323-268-1028 (FAX)

Website: www.Amvac-Chemical.com
E-mail: CustServ@Amvac-Chemical.com

Emergency phone number:

Medical 888-681-4261
CHEMTREC® (USA+Canada) 800-424-9300
Product Use 888-462-6822
CHEMTREC® (Outside USA) +1-703-527-3887

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Not classified.

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Hazard symbol: None.

Signal word: None.

Hazard statement: The mixture does not meet the criteria for classification.

Precautionary statement

Prevention: Observe good industrial hygiene practices.

Response: Wash hands after handling.

Storage: Store away from incompatible materials.

Disposal: Dispose of contents/container in accordance with all applicable local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

Very toxic to aquatic life.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifenthrin</td>
<td></td>
<td>82657-04-3</td>
<td>0.2</td>
</tr>
<tr>
<td>Carrier</td>
<td></td>
<td>7631-86-9</td>
<td>99.8</td>
</tr>
</tbody>
</table>

Material name: WISDOM® GC Granular

826 Version #: 02 Revision date: 03-04-2016 Issue date: 04-21-2015 SDS US 1 / 9
4. First-aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Get medical attention, if needed.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

Eye contact
Rinse with water. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed
Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Bifenthrin is moderately toxic if swallowed and has a low dermal toxicity. Gastric lavage using an endotracheal tube may be preferred to vomiting. Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information
IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Use water spray to cool unopened containers.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Stop the flow of material, if this is without risk. Attempt to reclaim the free product, if this is possible. If contaminated, sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling
Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Keep away from food, drink and animal feedstuffs. Keep out of the reach of children. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Wash thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities
Do not store in direct sunlight. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store in a well-ventilated place. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits
US. OSHA Table Z-3 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrier (CAS 7631-86-9)</td>
<td>TWA</td>
<td>0.8 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 mppcf</td>
</tr>
</tbody>
</table>

Material name: WISDOM® GC Granular

826 Version #: 02 Revision date: 03-04-2016 Issue date: 04-21-2015
### Biological limit values

**TWA** 6 mg/m³

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

If contact is likely, safety glasses with side shields are recommended.

#### Skin protection

- **Hand protection**: For prolonged or repeated skin contact use suitable protective gloves.
- **Other**: Wear suitable protective clothing.

#### Respiratory protection

Not available.

#### Thermal hazards

Not available.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

#### Appearance

- **Gray to brown or blue granule**

#### Physical state

- **Solid**

#### Form

- **Granular**

#### Color

- **Gray to brown**

#### Odor

- **Bland**

#### Odor threshold

None established

#### pH

Not available.

#### Melting point/freezing point

Not available.

#### Initial boiling point and boiling range

Not available.

#### Flash point

Not available.

#### Evaporation rate

Not available.

#### Flammability (solid, gas)

Not available.

#### Upper/lower flammability or explosive limits

- **Flammability limit - lower (%)**: Not available.
- **Flammability limit - upper (%)**: Not available.
- **Explosive limit - lower (%)**: Not available.
- **Explosive limit - upper (%)**: Not available.

#### Vapor pressure

1.81E-07 mm Hg @ 25°C (a.i.)

#### Vapor density

Heavier than air

#### Relative density

Not available.

#### Solubility(ies)

- **Solubility (water)**: Not appreciably soluble in water

#### Auto-ignition temperature

Not available.

#### Decomposition temperature

Not available.

#### Viscosity

Not available.

### Other information

- **Density**: 85.00 - 90.00 lb/ft³
- **Molecular formula**: C₂₃H₂₂ClF₃O₂ (Bifenthrin)
10. Stability and reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Contact with incompatible materials.

Incompatible materials: Not available.

Hazardous decomposition products: Emits hazardous fumes and smoke of unknown composition when heated to decomposition or burned.

11. Toxicological information

Information on likely routes of exposure:

- **Inhalation**: No adverse effects due to inhalation are expected.
- **Skin contact**: No adverse effects due to skin contact are expected.
- **Eye contact**: Direct contact with eyes may cause temporary irritation.
- **Ingestion**: Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics:

- **Contact with** Bifenthrin *may occasionally produce skin sensitization such as rashes, numbing, burning or tingling.*

Information on toxicological effects:

**Acute toxicity**: May cause respiratory irritation.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISDOM® GC Granular</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>rabbit</td>
<td>&gt; 5050 mg/kg</td>
</tr>
<tr>
<td>oral</td>
<td>female rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**: Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**: Slight irritant.

**Respiratory or skin sensitization**:

- **Respiratory sensitization**: Not a respiratory sensitizer.
- **Skin sensitization**: This product is not expected to cause skin sensitization.
- **Germ cell mutagenicity**: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**:

- **IARC Monographs. Overall Evaluation of Carcinogenicity**
  - Carrier (CAS 7631-86-9): 3 Not classifiable as to carcinogenicity to humans.
  - Not listed.
- **US. National Toxicology Program (NTP) Report on Carcinogens**
  - Not available.

**Reproductive toxicity**: This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**: Not classified.

**Specific target organ toxicity - repeated exposure**: Not classified.

**Aspiration hazard**: Not an aspiration hazard.
Chronic effects
No adverse effects due to inhalation are expected.

12. Ecological information

Ecotoxicity
Contains a substance which causes risk of hazardous effects to the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifenthrin (CAS 82657-04-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td>Crustacea LC50</td>
<td>0 - 0.0002 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Water flea (Ceriodaphnia dubia)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water flea (Daphnia magna)</td>
<td>0.0001 - 0.0009 mg/l, 48 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Partition coefficient n-octanol / water (log Kow)
WISDOM® GC Granular > 6, (Bifenthrin)

Mobility in soil
No data available.

Bioaccumulative potential
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Dispose of contents/container in accordance with all applicable local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with all applicable regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal according to all applicable regulations. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT
- UN number: UN3077
- UN proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Bifenthrin)
- Transport hazard class(es):
  - Class: 9
  - Subsidiary risk: -
  - Label(s): 9
- Packing group: III
- Environmental hazards: No
- Marine pollutant: Yes, when transported over large bodies of water in bulk
- Special precautions for user:
  - Read safety instructions, SDS and emergency procedures before handling.
  - Special provisions: 8, 146, 335, A112, B54, IB8, IP3, N20, T1, TP33
  - Packaging exceptions: 155
  - Packaging non bulk: 213
  - Packaging bulk: 240

IATA
- UN number: UN3077
- UN proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Bifenthrin)
- Transport hazard class(es):
  - Class: 9
  - Subsidiary risk: -
  - Label(s): 9
- Packing group: III
- Environmental hazards: Yes, when transported over large bodies of water in bulk
- Special precautions for user:
  - Read safety instructions, SDS and emergency procedures before handling.
Other information
- Passenger and cargo aircraft: Allowed.
- Cargo aircraft only: Allowed.

IMDG
- UN number: UN3077
- UN proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Bifenthrin), MARINE POLLUTANT
- Transport hazard class(es):
  - Class: 9
  - Subsidiary risk: -
  - Label(s): 9
- Packing group: III
- Environmental hazards: Yes
- Marine pollutant: Not available.
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- DOT; IATA; IMDG

Marine pollutant

General information
- IMDG Regulated Severe Marine Pollutant.
15. Regulatory information

US federal regulations

This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

HAZARD TO HUMANS AND DOMESTIC ANIMALS.

CAUTION! Harmful if absorbed through skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not contaminate water when disposing of equipment washwaters. Keep out of lakes, streams, ponds, tidal marshes or estuaries. Do not contaminate water by cleaning of equipment or disposal of wastes. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure wind or rain does not blow or wash pesticide off the treatment area. Sweeping any product that lands on a driveway, sidewalk, or street, back onto the treated area of the lawn or garden will help to prevent runoff to water bodies or drainage systems.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.
US. Massachusetts RTK - Substance List
Carrier (CAS 7631-86-9)

US. New Jersey Worker and Community Right-to-Know Act
Bifenthrin (CAS 82657-04-3)
Carrier (CAS 7631-86-9)

US. Pennsylvania Worker and Community Right-to-Know Law
Carrier (CAS 7631-86-9)

US. Rhode Island RTK
Bifenthrin (CAS 82657-04-3)

US. California Proposition 65
WARNING: This product contains a chemical known to the State of California to cause cancer.

**International Inventories**

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDNL)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)*  
*A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).*

16. Other information, including date of preparation or last revision

**Issue date**
04-21-2015

**Revision date**
03-04-2016

**References**
ACGIH®: American Conference of Governmental Industrial Hygienists  
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act  
EPA: Environmental Protection Agency  
FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act  
IARC: International Agency for Research on Cancer  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Agency  
SARA: Superfund Amendments and Reauthorization Act  
TSCA: Toxic Substances Control Act  
DOT: Department of Transportation  
IMDG: International Maritime Dangerous Goods  
IATA: International Air Transport Association

**Version #**
02

**Further information**
Not available.

**HMIS® ratings**
Health: 2*  
Flammability: 0  
Physical hazard: 0

**NFPA ratings**
Health: 2  
Flammability: 0  
Instability: 0

**Disclaimer**
AMVAC Chemical Corporation cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user’s responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

©2015 AMVAC Chemical Corporation. All Rights Reserved. AMVAC, WISDOM, and the Beaker Logo are trademarks owned by AMVAC Chemical Corporation. ACGIH is a trademark of the American Conference of Governmental Industrial Hygienists. Chemtrec is a trademark of the American Chemistry Council, Inc. NFPA is a trademark of the American Coatings Association.