Section 1: Identification

Product identifier

Product Name • Zodiac Flea & Tick Powder for Dogs, Puppies, Cats & Kittens
Synonyms • 27830A; Elite Pyrethrin Powder; EPA Reg. No.: 2724-627
Product Description • White to off-white powder.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use • Insecticide.
Restrictions on use • Keep out of the reach of children. Avoid contact with eyes, skin or clothing.

Details of the supplier of the safety data sheet

Manufacturer • Wellmark International
1501 E. Woodfield Road, Suite 200 West
Schaumburg, IL 60173
United States

Emergency telephone number

Manufacturer • 1-800-424-9300 - CHEMTREC
Manufacturer • 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted
Manufacturer • 1-800-950-4783

Section 2: Hazard Identification

United States (US)
According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Skin Sensitization 1

Label elements

OSHA HCS 2012

WARNING

Hazard statements • May cause an allergic skin reaction

Precautionary statements

Prevention • Avoid breathing dust, fume, gas, mist, vapors and/or spray. Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.

**Response**
- IF ON SKIN: Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Storage/Disposal**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Other hazards**

**OSHA HCS 2012**
- This product is toxic to fish. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is not considered hazardous.

### Section 3 - Composition/Information on Ingredients

**Substances**
- Material does not meet the criteria of a substance.

**Mixtures**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>CAS:8003-34-7</td>
<td>0.1%</td>
</tr>
<tr>
<td>Piperonyl butoxide</td>
<td>CAS:51-03-6</td>
<td>1%</td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>CAS:7631-86-9</td>
<td>2%</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>NDA</td>
<td>Balance</td>
</tr>
</tbody>
</table>

### Section 4: First-Aid Measures

**Description of first aid measures**

**Inhalation**
- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms occur.

**Skin**
- IF ON SKIN: Wash skin with soap and water. If irritation develops and persists, get medical attention.

**Eye**
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.

**Ingestion**
- IF SWALLOWED: Give large amounts of water. If symptoms persist, consult doctor.

**Most important symptoms and effects, both acute and delayed**
- An allergic skin reaction may occur in individuals with a sensitivity to piperonyl butoxide. Refer to Section 11 - Toxicological Information.
Indication of any immediate medical attention and special treatment needed
Notes to Physician  • Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media
Suitable Extinguishing Media  • SMALL FIRES: Dry chemical, CO2, water spray or regular foam.
Unsuitable Extinguishing Media  • Avoid heavy hose streams.
Firefighting Procedures  • Do not allow fire fighting water to escape into waterways or sewers.

Special hazards arising from the substance or mixture
Unusual Fire and Explosion Hazards  • None known.
Hazardous Combustion Products  • None known.

Advice for firefighters  • Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Personal Precautions  • Avoid contact with skin, eyes, and clothing. Wear appropriate personal protective equipment, avoid direct contact.
Emergency Procedures  • No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended.

Environmental precautions  • Avoid run off to waterways and sewers.

Methods and material for containment and cleaning up
Containment/Clean-up Measures  • Sweep or scoop up spills, dispose of any unusable material in approved landfill.

Section 7 - Handling and Storage

Precautions for safe handling
Handling  • Avoid contact with skin, eyes, and clothing.

Conditions for safe storage, including any incompatibilities
Storage  • Store in cool, dry area, inaccessible to children. Do not store near or with hazardous or toxic substances. Keep container tightly closed. Store in a cool, dry place.

Incompatible Materials or Ignition Sources  • None known.

Section 8 - Exposure Controls/Personal Protection
Control parameters

<table>
<thead>
<tr>
<th></th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>5 mg/m3 TWA</td>
<td>5 mg/m3 TWA</td>
<td>5 mg/m3 TWA</td>
</tr>
<tr>
<td>(8003-34-7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>Not established</td>
<td>6 mg/m3 TWA</td>
<td>See below</td>
</tr>
<tr>
<td>(7631-86-9)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exposure Limits Supplemental

OSHA
- Silica, amorphous (7631-86-9): Mineral Dusts: (20 mppcf TWA; (80)/(% SiO2) mg/m3 TWA)

ACGIH
- Pyrethrins (8003-34-7): TLV Basis - Critical Effects: (liver damage; lower respiratory tract irritation)

Exposure controls

Engineering Measures/Controls
- No data available

Personal Protective Equipment
- Respiratory
  - In case of insufficient ventilation, use NIOSH approved respiratory protection.
- Eye/face
  - Wear safety glasses.
- Hands
  - Wear appropriate gloves.
- Skin/Body
  - If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

General Industrial Hygiene Considerations
- Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls
- Avoid release to the environment.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Color</th>
<th>Odor Threshold</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Description</td>
<td>White to off-white.</td>
<td>White to off-white.</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic insecticidal odor.</td>
<td>Odor Threshold</td>
<td>Not relevant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Properties</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>No data available</td>
<td>Melting Point/Freezing Point</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
<td>pH</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>0.91 g/cc</td>
<td>Bulk Density</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble</td>
<td>Viscosity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Volatility</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
<td>Vapor Density</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flammability</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Not relevant</td>
<td>UEL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Exposure Controls</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Section 10: Stability and Reactivity

### Reactivity
- Non-reactive under normal handling and storage conditions.

### Chemical stability
- Stable

### Possibility of hazardous reactions
- Hazardous polymerization will not occur.

### Conditions to avoid
- No data available.

### Incompatible materials
- No data available.

### Hazardous decomposition products
- No data available.

## Section 11 - Toxicological Information

### Information on toxicological effects

<table>
<thead>
<tr>
<th>Components</th>
<th>Acute Toxicity</th>
<th>Irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins (0.1%)</td>
<td>Ingestion/Oral-Rat LD50 • 1400 mg/kg; Ingestion/Oral-Rat, adult female LD50 • 700 mg/kg; Ingestion/Oral-Rat, adult male LD50 • 2140 mg/kg; Inhalation-Rat LC50 • 3.4 mg/L; Inhalation-Rat, adult female LD50 • 2.5 mg/L; Inhalation-Rat, adult male LC50 • 3.9 mg/L; Skin-Rabbit LD50 • &gt;2000 mg/kg;</td>
<td>Eye-Rabbit • Mild irritation; Skin-Rabbit • Mild irritation</td>
</tr>
<tr>
<td>Piperonyl butoxide (1%)</td>
<td>Ingestion/Oral-Rat • 4300 mg/kg; Inhalation-Rat • &gt;5 mg/L 4 Hour(s); Skin-Rat LD50 • &gt;2000 mg/kg;</td>
<td>Eye-Rabbit • Essentially non-irritating; Skin-Rabbit • Essentially non-irritating</td>
</tr>
</tbody>
</table>

### GHS Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Toxicity for Reproduction</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
</tbody>
</table>

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Preparation Date: 13/May/2016
Revision Date: 13/May/2016

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Potential Health Effects

Inhalation
- **Acute (Immediate)**: Under normal conditions of use, no health effects are expected.
- **Chronic (Delayed)**: No data available

Skin
- **Acute (Immediate)**: May cause an allergic skin reaction in individuals with a sensitivity to piperonyl butoxide.
- **Chronic (Delayed)**: No data available

Eye
- **Acute (Immediate)**: Under normal conditions of use, no health effects are expected.
- **Chronic (Delayed)**: No data available

Ingestion
- **Acute (Immediate)**: Under normal conditions of use, no health effects are expected.
- **Chronic (Delayed)**: No data available

Other
- **Chronic (Delayed)**: No data available

Mutagenic Effects
- Pyrethrins were not found to be genotoxic and did not damage DNA in any study conducted which included: Ames assay, chromosome aberration in Chinese hamster ovaries (CHO) cells and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells. Piperonyl butoxide was not mutagenic in a battery of tests.

Carcinogenic Effects
- Pyrethrins are not listed as a carcinogen by OSHA, IARC, or NTP. Piperonyl butoxide is not classified as carcinogen by NTP, IARC and OSHA. No other components present at 0.1% or greater are listed by IARC, OSHA or NTP.

Reproductive Effects
- Pyrethrins did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits. Piperonyl butoxide did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits.

Section 12 - Ecological Information

### Toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Aquatic Toxicity-Fish:</th>
<th>Aquatic Toxicity-Crustacea:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins (0.1%)</td>
<td>LC50 Rainbow trout 0.0051 mg/L [Acute]</td>
<td>LC50 Daphnia magna 0.00086 mg/L [Chronic]</td>
</tr>
<tr>
<td></td>
<td>LC50 Sheephead minnow 0.016 mg/L [Acute]</td>
<td>NOEC Myisid shrimp 0.0001 mg/L [Chronic (Est.)]</td>
</tr>
<tr>
<td></td>
<td>NOEC Fathead minnow 0.0019 mg/L [Chronic]</td>
<td>48 Hour(s) LC50 Daphnia magna 0.0116 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>96 Hour(s) LC50 Sheephead minnow 0.0059 mg/L [Chronic (Est.)]</td>
<td>96 Hour(s) LC50 Mysid shrimp 0.0014 mg/L [Acute]</td>
</tr>
<tr>
<td>Piperonyl butoxide</td>
<td>LC50 Rainbow Trout 1.9 mg/L [Acute]</td>
<td>LC50 Sheephead minnow 3.94 mg/L [Acute]</td>
</tr>
<tr>
<td>(1%)</td>
<td>NOEC Fathead minnow 0.04 mg/L [Chronic]</td>
<td>NOEC Myisid shrimp 0.0001 mg/L [Chronic (Est.)]</td>
</tr>
<tr>
<td></td>
<td>Aquatic Toxicity-Crustacea:</td>
<td>LC50 Gammarus fasciatus (amphipod) 0.51 mg/L [Acute]</td>
</tr>
</tbody>
</table>
Persistence and degradability

- Pyrethrins have low persistence in the environment due to rapid breakdown in presence of UV light.

Bioaccumulative potential

- No data available

Mobility in Soil

- Pyrethrins are relatively immobile in soil.

Other adverse effects

Potential Environmental Effects

- This product is toxic to fish.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class (es)</th>
<th>Packing group</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Not Applicable</td>
<td>Not regulated in non-bulk packaging</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Special precautions for user

- None specified.
- No data available

Other information

- IMO/IMDG: No data available
- IATA/ICAO: No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

- Acute, SARA Title III Section 313

FIFRA – Pesticide Labeling

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.

**CAUTION**

**KEEP OUT OF REACH OF CHILDREN**

### Hazard Statements

**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

Avoid breathing dust and contact with skin and eyes. Sensitivities may occur after using ANY pesticide product for pets. If signs of sensitivity occur, bathe your pet with a mild soap and rinse with large amounts of water. If signs continue, consult a veterinarian immediately.

**First Aid**

IF INHALED: Mover person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. IF IN EYES: 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 poison control center or doctor for treatment advice.

**Environmental Hazards**

This product is toxic to fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

### Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide</td>
<td>51-03-6</td>
<td>Yes</td>
</tr>
<tr>
<td>Pyrethrins</td>
<td>8003-34-7</td>
<td>No</td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### United States

**Environment**

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

- Silica, amorphous 7631-86-9 Not Listed
- Piperonyl butoxide 51-03-6 Not Listed
- Pyrethrins 8003-34-7 1 lb final RQ (listed under Pyrethrins); 0.454 kg final RQ (listed under Pyrethrins)

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

- Silica, amorphous 7631-86-9 Not Listed
- Piperonyl butoxide 51-03-6 1.0 % de minimis concentration
- Pyrethrins 8003-34-7 Not Listed

### Section 16 - Other Information

**Revision Date** 13/May/2016
The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.