Section 1: Identification

Product identifier

Product Name • Centynal Insecticide
Synonyms • 100511126; EPA Reg. No.: 53883-276-2724
Product Description • White liquid.

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 and skin. Do not inhale.

Details of the supplier of the safety data sheet

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

Emergency telephone number

Manufacturer • 1-800-424-9300 - CHEMTREC
Manufacturer • 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted
Manufacturer • 1-888-914-2082

Section 2: Hazard Identification

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

Classification of the substance or mixture

OSHA HCS 2012 • Acute Toxicity Inhalation 4

Label elements

OSHA HCS 2012

WARNING

Hazard statements • Harmful if inhaled
Precautionary statements

Prevention • Avoid breathing dust, fume, gas, mist, vapors and/or spray. Use only outdoors or in a well-ventilated area.

Response • IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell. Get medical advice/attention if you feel unwell.

Other hazards

OSHA HCS 2012 • This product is extremely toxic to fresh water and estuarine fish and invertebrates. This product is highly toxic to bees exposed to direct treatment. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is 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>Compositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deltamethrin</td>
<td>CAS: 52918-63-5</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>NDA</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Description of first aid measures

Inhalation • IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor if you feel unwell.

Skin • IF ON SKIN: 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.

Eye • IF IN EYES: Hold eye open and rinse 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.

Ingestion • IF SWALLOWED: Call a poison control center or physician for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless instructed to do so by poison control or physician. Do not give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed

- Harmful if inhaled. General neurological symptoms were exhibited in studies with rats, mice and dogs. These symptoms included unsteadiness, abnormal gait, tremors and liquid feces. 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

- Use water fog, foam, carbon dioxide, or dry chemical.

Unsuitable Extinguishing Media

- Avoid heavy hose streams.

Firefighting Procedures

- Keep unauthorized personnel away.
- Stay upwind.
- Ventilate closed spaces before entering.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- Do not use water-based sprays of Delta 4.75% SC in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

Hazardous Combustion Products

- Thermal degradation may produce oxides of carbon, oxides of nitrogen and/or volatile hydrocarbon vapors.

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

- Use appropriate Personal Protective Equipment (PPE). Ventilate enclosed areas. Do not walk through spilled material.

Emergency Procedures

- Do not allow runoff into water, storm drains or drainage ditches. Stay upwind. Wear appropriate personal protective equipment (PPE). Keep unauthorized personnel away.

Environmental precautions

- Do not allow runoff into water, storm drains or drainage ditches.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Absorb with earth, sand or other non-combustible material and transfer to containers. Use appropriate Personal Protective Equipment (PPE).

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Avoid contact with skin, eyes, and clothing. Keep away from heat, sparks, and flame.
Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing fumes. Read label before use. Wash hands thoroughly with soap and water after handling. Do not take internally.

Conditions for safe storage, including any incompatibilities

Storage
• Avoid extreme temperatures. Store in a tightly closed container. Store in a well ventilated place. Store in cool, dry area, inaccessible to children. Store in original container.

Incompatible Materials or Ignition Sources
• Strong acids, strong bases, and oxidizing agents. Do not use water-based sprays of Delta 4.75% SC in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure controls
Engineering Measures/Controls
• Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment
Pictograms
•

Respiratory
• If handling without sufficient ventilation, wear a NIOSH approved respirator.

Eye/Face
• If splashes are likely to occur, wear: Safety glasses with side-shields, Goggles.

Hands
• Wear chemical resistant gloves.

Skin/Body
• It is recommended for handlers to wear appropriate clothing to prevent skin contact including long sleeves, long pants, socks and shoes.

Environmental Exposure Controls
• Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>White liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| General Properties                   |               |                        |               |
| Boiling Point                        | No data available |                    |               |
| Decomposition Temperature            | No data available |                    |               |
| Melting Point/Freezing Point         | No data available |                    |               |
| pH                                   |               |                       | 6             |
### Section 10: Stability and Reactivity

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

**Chemical stability**
- Stable under normal temperatures and pressures.

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

**Conditions to avoid**
- Avoid extreme temperatures (below 0°C or above 40°C).

**Incompatible materials**
- Strong acids, strong bases and oxidizing agents.

**Hazardous decomposition products**
- Decomposes upon heating to produce toxic gases which may include: nitrogen oxides, carbon oxides.

### Section 11 - Toxicological Information

#### Information on toxicological effects

<table>
<thead>
<tr>
<th>CAS</th>
<th>Acute Toxicity: Ingestion/Oral-Rat LD50 • &gt;15000 mg/kg; Inhalation-Rat LC50 • &gt;1.02 mg/L 4 Hour(s); Skin-Rabbit LD50 • &gt;10000 mg/kg; Irritation: Eye-Species unspecified • Essentially non-irritating; Skin-Species unspecified • Mild irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GHS Properties</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation 4; Acute Toxicity - Oral - Classification criteria not met</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
</tbody>
</table>
### Skin sensitization
- OSHA HCS 2012: Classification criteria not met

### Respiratory sensitization
- OSHA HCS 2012: Classification criteria not met

### Aspiration Hazard
- OSHA HCS 2012: Classification criteria not met

### Carcinogenicity
- OSHA HCS 2012: Classification criteria not met

### Germ Cell Mutagenicity
- OSHA HCS 2012: Classification criteria not met

### Toxicity for Reproduction
- OSHA HCS 2012: Classification criteria not met

### STOT-SE
- OSHA HCS 2012: Classification criteria not met

### STOT-RE
- OSHA HCS 2012: Classification criteria not met

#### Route(s) of entry/exposure
- Inhalation, Skin, Eye, Ingestion.

#### Potential Health Effects

##### Inhalation
- **Acute (Immediate)**: Harmful if inhaled.
- **Chronic (Delayed)**: No data available.

##### Skin
- **Acute (Immediate)**: May cause mild irritation. May be harmful if absorbed through skin. May cause a transient, localized parasthesia, characterized by tingling, burning or numbness sensation in some individuals.
- **Chronic (Delayed)**: No data available

##### Eye
- **Acute (Immediate)**: May cause minimal irritation.
- **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)**: General neurological symptoms were exhibited in studies with rats, mice and dogs. These symptoms included unsteadiness, abnormal gait, tremors and liquid feces.

##### Mutagenic Effects
- Deltamethrin has been tested and found negative for mutagenicity potential.

##### Carcinogenic Effects
- Deltamethrin was not carcinogenic in lifetime feeding studies in rats and mice. No other components present at 0.1% or greater are listed by IARC, OSHA or NTP.

##### Reproductive Effects
- Deltamethrin does not cause birth defects or adverse effects on reproduction.

---

### Section 12 - Ecological Information

#### Toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Aquatic Toxicity-Fish:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deltamethrin (4.75%) 52918-63-5</td>
<td>96 Hour(s) LC50 Rainbow trout 0.00026 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>96 Hour(s) LC50 Bluegill sunfish 0.00017 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>96 Hour(s) LC50 Sheepshead minnow 0.00048 mg/L [Acute]</td>
</tr>
</tbody>
</table>

#### Persistence and degradability
Deltamethrin: Hydrolytic Half-Life: 2.28-2.70 days @ pH 9.0 Photolytic Half-Life: 64-86 days (water); 9 days (soil) Soil Half-Life: 14-40 days (cropped plots); 37-69 days (bare ground) in field dissipation studies.

Bioaccumulative potential

- No data available

Mobility in Soil

- The major routes of dissipation are soil binding and soil microbial degradation. Although soil binding is strong, it is not immediate. It appears that spray drift is the only significant route of exposure to aquatic organism. However, deltamethrin’s strong binding capacity to slime, plants, sediment, etc., might rapidly prevent the availability of deltamethrin for bioconcentration in aquatic systems. Additionally, its insolubility in water will be a factor in limiting its bioconcentration as well. Deltamethrin hydrolyzes under alkaline conditions. Leaching studies indicate that Deltamethrin is immobile.

Other adverse effects

Potential Environmental Effects

- This product is extremely toxic to fresh water and estuarine fish and invertebrates. This product is highly toxic to bees exposed to direct treatment.

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. See product label for disposal instructions.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>DOT</th>
<th>UN3082</th>
<th>Bulk packaging only: Environmentally hazardous substance, liquid, n.o.s. (Deltamethrin)</th>
<th>9</th>
<th>III</th>
<th>Marine Pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMO/IMDG</td>
<td>UN3082</td>
<td>Packaging 5 L or greater: Environmentally hazardous substance, liquid, n.o.s. (Deltamethrin)</td>
<td>9</td>
<td>III</td>
<td>Marine Pollutant</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>UN3082</td>
<td>Packaging 5 L or greater: Environmentally hazardous substance, liquid, n.o.s. (Deltamethrin)</td>
<td>9</td>
<td>III</td>
<td>Acute Aquatic Toxicity</td>
</tr>
</tbody>
</table>

Special precautions for user

- No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- 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

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

Precautionary Statements
• KEEP OUT OF THE REACH OF CHILDREN.

Hazards to Humans and Domestic Animals
Harmful if inhaled. Avoid breathing vapor or spray mist. Contact with product may result in transient tingling and reddening of the skin. Remove contaminated clothing and wash before reuse.

First Aid
• IF INHALED: Move 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 poison control center or doctor for treatment advice.

Environmental Hazards
This product is extremely toxic to fresh water and estuarine fish and invertebrates. 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 that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. This pesticide is highly toxic to bees exposed to direct treatment. Do not apply or allow it to drift to crops or weeds on which bees are actively foraging.

Physical or Chemical Hazards
Do not use water-based sprays of Delta 4.75% SC in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deltamethrin</td>
<td>52918-63-5</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 16 - Other Information

Revision Date  •  15/March/2016
Last Revision Date  •  15/March/2016
Preparation Date  •  15/March/2016
Disclaimer/Statement of Liability
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.