1. Identification

Product Name: SULTRUS  
Synonyms: None  
Product Use: beta-Cyfluthrin Insecticide  
Manufacturer/Supplier: Helena Chemical Company  
Address: 225 Schilling Blvd. Collierville, TN 38017  
General Information: 901-761-0050  
Transportation Emergency Number: CHEMTREC:800-424-9300

2. Hazard Identification

Signal Word: Danger  
Skin Irritation: Moderate skin irritant. Causes skin irritation.  
Eye Irritation: Severe eye irritant.  
Acute Toxicity Oral: LD50 (rat) = 647 mg/kg (male); 695 mg/kg (female) for a similar product with 2X Cyfluthrin.  
Acute Toxicity Dermal: LD50 (rabbit) >2,000 mg/kg for a similar product with 2X Cyfluthrin.  
Hazard Categories: Oral/Dermal/Inh Tox-4/5/3; Eye/Skin Irr-2A/2; Skin Sens-1B; Combustible-4; Reproductive Tox-1B  
Hazard Statement: Harmful if swallowed  
May be harmful in contact with skin  
Toxic if inhaled  
Causes serious eye irritation  
Causes skin irritation  
May cause an allergic skin reaction  
May damage fertility or the unborn child  
Combustible liquid

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>beta-Cyfluthrin Technical</td>
<td>68359-37-5</td>
<td>12.86</td>
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</tbody>
</table>
Other ingredients, including:

Proprietary solvent  Proprietary  87.14
Cyclohexanone  108-94-1  15.20
Emulsifiers  Proprietary  5-10

4. First Aid Measures

**Eye**: Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

**Skin**: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

**Inhalation**: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**Ingestion**: Call a poison control center or doctor immediately for treatment advice. Rinse out mouth and give water in small sips to drink. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth if unconscious.

**Indication of Immediate Medical Attention and Special Treatment Needed**: Contains hydrocarbon solvents. May pose an aspiration pneumonia hazard. Treat symptomatically. There is no specific antidote.

5. Fire Fighting Measures

**Extinguishing Media**: Use foam, dry chemical or water spray.

**Specific Hazards Arising from the Chemical**: No information found

**Special Fire Fight Proc**: Wear self-contained breathing apparatus and full protective clothing. Fight fire from upwind. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

6. Accidental Release Measures

**Personal Precautions**: Keep unauthorized and unprotected personnel away from spill area. Avoid contact with spilled product or contaminated surfaces.

**Protective Equipment**: Splashproof goggles or face shield, chemical-resistant gloves, long-sleeved shirt and long pants, shoes plus socks. Eyewash should be available. Use NIOSH-approved respirator when needed.

**Emergency Procedures**: Use personal protective equipment. Do not allow to enter soil, waterways or drains.

**Methods and Materials for Containment and Cleanup**: Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer to a properly labeled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
7. Handling and Storage

Precautions for Safe Handling: Handle and open container in a manner as to prevent spillage. Keep away from sources of ignition.

Conditions for Safe Storage: Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food and feed. Store in original container and out of reach of children, preferably in a locked storage area.

8. Exposure Controls / Personal Protection

TLV/PEL: Cyclohexanone: PEL 50 ppm Naphthalene: PEL 10 ppm

Appropriate Engineering Controls: No information found

Personal Protective Equipment: Splashproof goggles or face shield, chemical-resistant gloves, long-sleeved shirt and long pants, shoes plus socks. Eyewash should be available. Use NIOSH-approved respirator when needed.

9. Physical and Chemical Properties

Odor/Appearance: Clear yellow to greenish yellow liquid.
Flash Point, °F: 142 Degrees F. (Seta flash)
Boiling Point, °F: No information found
Melting Point (Freezing point), °C: No information found
Vapor Pressure, mm Hg @ 20 °C: No information found
Vapor Density: No information found
Solubility in Water: No information found
Molecular Formula: Not applicable, formulated mixture.
Density, g/mL @ 25 °C: 0.980-1.000
Evaporation Rate (Butyl Acetate = 1):
Octanol/Water Partition Coefficient: No information found
pH: No information found
Flammable Limits (approximate volume % in air): No information found
Auto-ignition Temperature: No information found
Decomposition temperature: No information found

10. Stability and Reactivity

Reactivity: No information found
Chemical Stability: Stable
11. Toxicological Information

**Acute Toxicity (Inhalation LC50):** >0.7 mg/L/4 hr (F rat) (in similar product with 2X cyfluthrin). Toxic if inhaled.

**Likely Routes of Exposure:** Eyes, skin, ingestion, inhalation.

**Skin Irritation:** Causes skin irritation. Moderate skin irritation (rabbit).

**Eye Irritation:** Causes serious eye irritation. Severe eye irritation (rabbit).

**Skin Sensitization:** May cause an allergic skin reaction. Sensitizer (guinea pig).

**Carcinogenic:** Not listed by OSHA.

**Chronic Effects:** Reproductive Toxicity: May damage fertility or the unborn child (NMP - N-Methylpyrrolidone dist.). Not a primary developmental toxicant in rats. Not mutagenic or genotoxic.

**Other Hazards:** CA Prop 65 Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

12. Ecological Information

**Ecotoxicity:** May be hazardous to aquatic organisms.

**Persistence and Degradability:** No information found

**Bioaccumulative Potential:** No information found

**Mobility in Soil:** No information found

**Other Adverse Effects:** Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor runoff or drift. Do not apply if bees are visiting treatment area.

13. Disposal Considerations

**Waste Disposal Method:** This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

**UN Proper Shipping Name:** Not regulated by DOT in non-bulk packages.
Transport Hazard Class: None
UN Identification Number: None
Packaging Group: None
Environmental Hazards: Marine Pollutant per GHS classification only, not on Appendix B to 49 CFR 172.101.

Transport in Bulk: If shipped by ground in bulk, ship as: RQ, NA1993, Combustible Liquid, n.o.s., (Beta-Cyfluthrin, Cyclohexanone, Naphthalene), PG III "ERG # 128"

Special Precautions for Transportation: If shipped by air (IATA) or vessel (IMDG), ship as: UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Beta-Cyfluthrin, Cyclohexanone Solution), 9, PG III, Marine Pollutant

Freight Classification: Pesticides, NOI, Insecticides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating:

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No):

Immediate (Acute) Health: Y
Delayed (Chronic) Health: Y
Sudden Release of Pressure:
Fire: Y
Reactive: N

FIFRA Information: This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Registration Number: S905-599
FIFRA Signal Word: Caution
FIFRA Label Statement: Keep out of reach of children.
FIFRA Label Statement: Causes moderate eye irritation. Avoid contact with eyes or clothing.
FIFRA Label Statement: Wear goggles or protective glasses. Harmful if swallowed.
FIFRA Label Statement: Wash thoroughly with soap and water after handling and before eating, drinking or using the toilet. Harmful if inhaled.
FIFRA Label Statement: Avoid breathing spray mist. Remove and wash contaminated clothing before reuse.
FIFRA Label Statement: Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals.

16. Other Information

Data of Preparation/Revision: 07-September-2017