1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**
- **Product Name**: Tebuconazole
- **Product Code**: SC-204906

**Recommended use of the chemical and restrictions on use**
For research use only. Not intended for diagnostic or therapeutic use.

**Details of the supplier of the safety data sheet**
Santa Cruz Biotechnology, Inc.
10410 Finnell Street
Dallas, TX 75220
831.457.3800
800.457.3801
scbt@scbt.com

**Emergency telephone number**
Chemtrec
1.800.424.9300 (Within USA)
+1.703.527.3887 (Outside USA)

2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification**
- **Acute toxicity - Oral**: Category 4
- **Acute toxicity - Inhalation (Dusts/Mists)**: Category 3
- **Reproductive toxicity**: Category 2

**Label elements**
- **Signal word**: Danger
- **Hazard statements**
  - HARMFUL IF SWALLOWED
  - Toxic if inhaled
  - Suspected of damaging fertility or the unborn child

**Precautionary Statements - Prevention**
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**
- IF exposed or concerned: Get medical advice/attention
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth

**Precautionary Statements - Storage**
- Store locked up
- Store in a well-ventilated place.
- Keep container tightly closed
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazard not otherwise classified (HNOC)
Hazards not otherwise classified (HNOC) Not applicable

Other Information
Other hazards Toxic to aquatic life with long lasting effects.

NFPA  Health hazards 2
Flammability 1
Stability 0
Physical and chemical properties -

HMIS  Health hazards 3
Flammability 1
Physical hazards 0
Personal protection -

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight %</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3</td>
<td>&gt;98</td>
<td>-</td>
<td>-</td>
<td>&gt; 800 mg/m³ (Rat) 4 h</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First Aid Measures
General advice If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Inhalation Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Ingestion Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.
Self-protection of the first aider Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed
Symptoms No information available.

Indication of any immediate medical attention and special treatment needed
Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

Specific hazards arising from the chemical
Specific hazards arising from the chemical Hazardous combustion products
Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

**Explosion data**
- **Sensitivity to Mechanical Impact**: No information available.
- **Sensitivity to Static Discharge**: No information available.

**Protective equipment and precautions for firefighters**
Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal precautions</td>
<td>Use personal protective equipment as required.</td>
</tr>
<tr>
<td>Environmental precautions</td>
<td>Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.</td>
</tr>
</tbody>
</table>

**Methods and material for containment and cleaning up**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods for containment</td>
<td>Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.</td>
</tr>
<tr>
<td>Methods for cleaning up</td>
<td></td>
</tr>
</tbody>
</table>

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

**Conditions for safe storage, including any incompatibilities**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Conditions</td>
<td>Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Store at room temperature.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>None known based on information supplied.</td>
</tr>
</tbody>
</table>

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

*Exposure Guidelines* This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

<table>
<thead>
<tr>
<th>Engineering Controls</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Showers</td>
<td></td>
</tr>
<tr>
<td>Eyewash stations</td>
<td></td>
</tr>
<tr>
<td>Ventilation systems</td>
<td></td>
</tr>
</tbody>
</table>
Individual protection measures, such as personal protective equipment
Eye/face protection  
Tight sealing safety goggles.
Skin and Body Protection  
Wear protective gloves and protective clothing.
Respiratory protection  
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations  
When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>powder</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>102 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>476.85 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>100.00 °C</td>
</tr>
<tr>
<td>Density</td>
<td>1.25 g/cm³</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper flammability limits</td>
<td>No information available</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>0</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>No information available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>3.70</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

| Reactivity                      | Not applicable                                                 |
| Chemical stability              | Stable under recommended storage conditions.                   |
| Possibility of Hazardous Reactions | None under normal processing.                               |
| Hazardous polymerization        | No information available.                                      |
| Conditions to avoid             | Extremes of temperature and direct sunlight.                   |
| Incompatible materials          | Strong oxidizing agents.                                       |

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Inhalation  
No data available.
Eye contact  
No data available.
Skin Contact  
No data available.
Ingestion  
No data available.

Information on toxicological effects
Symptoms
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Chronic Toxicity
No information available.

Numerical measures of toxicity - Product Information
Unknown acute toxicity
No information available

The following values are calculated based on chapter 3.1 of the GHS document

- **ATEmix (oral)**: 500 mg/kg
- **ATEmix (inhalation-dust/mist)**: 0.5 mg/l
- **ATEmix (inhalation-vapor)**: 800 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxic to aquatic life with long lasting effects

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Mobility
No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Do not reuse container.

Other Information
Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

**DOT**

- UN/ID no: UN3077
- Hazard Class: 9
- Packing Group: III
- Proper shipping name: Environmentally hazardous substances, solid, n.o.s
- Description: UN3077, Environmentally hazardous substances, solid, n.o.s (Tebuconazole), 9, III
- Emergency Response Guide Number: 171

**IMDG**

- UN/ID no: UN3077
- Hazard Class: 9
- Packing Group: III
- Proper shipping name: Environmentally hazardous substances, solid, n.o.s
- Description: UN3077, Environmentally hazardous substances, solid, n.o.s (Tebuconazole), 9, III
- Special Provisions: 274, 335, 966, 967
- EmS-No: F-A, S-F

**IATA**

- UN/ID no: UN3077
Hazard Class 9
Packing Group III
Proper shipping name Environmentally hazardous substances, solid, n.o.s
Description UN3077, Environmentally hazardous substances, solid, n.o.s (Tebuconazole), 9, III

15. REGULATORY INFORMATION

International Inventories
All of the components in the product are on the following Inventory lists
South Korea (KECL): China (IECSC) ENCS (Japan): Philippines (PICCS)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tebuconazole</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
</tbody>
</table>

X - Listed
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
- Acute health hazard: Yes
- Chronic Health Hazard: Yes
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
This product does not contain any substances regulated by state right-to-know regulations

16. OTHER INFORMATION

Revision note
No information available

Disclaimer
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
End of Safety Data Sheet