1. Chemical Product Identification

Product Name: Hexaconazole
Molecular Formula: C_{14}H_{17}Cl_{2}N_{3}O
Molecular Weight: 314.2
Structural Formula:

![Structural Formula Image]

Chemical Name: α-butyl-α-(2, 4-dichlorophenyl)-1H-1, 2, 4-triazole-1-ethanol
Form: crystalline solid
Colour: white
Odour: odorless
CAS No.: 79983-71-4

2. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Composition</th>
<th>CAS No.</th>
<th>Content %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexaconazole</td>
<td>79983-71-4</td>
<td>95.0</td>
</tr>
<tr>
<td>Others ingredients</td>
<td></td>
<td>5.0</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Primary Route of Entry:
Inhalation, absorption skin contact

4. First Aid Measures
   Eyes: Flush immediately with fresh water for at least 15 minutes while holding eyes open.
   Skin: Thoroughly wash with soap and ester.
   Ingestion: Give water or milk to drink. Get medical aid before inducing vomiting.

5. Fire-Fighting Measures
   Flammable Limits: N/A
   Lower Explosive Limit (LEL): N/A
   Upper Explosive Limited (UEL): N/A
   Fire Extinguishing Media: Dry chemicals, carbon dioxide for small fires. Water spray or foam for large fires.
   Special Fire Fighting Procedures:
   Wear niosh/msha approved self-contained breathing apparatus and full protective clothing
   Unusual Fire and Explosion Hazards:
   Thermal decomposition (e.g. fire) may produce carbon monoxide, carbon dioxide, nitrogen oxides

6. Accidental Release Measures
   Steps to be taken in case material is released or spilled:
   Appropriate protective equipment must be worn when handling a spill of this material. See Section 8, Exposure Controls/personal protection for recommendations, if exposed to material during clean-up operations, see Section 4, First Aid Measures for actions to follow.

7. Handling and Storage
   Avoid eye, skin, and mouth contact. Store in original containers away from food stuffs, animal feed.

8. Exposure Controls/personal protection
   Engineering controls: Local exhaust or general ventilation to maintain exposure below PEL.
   Personal Protective Equipment (PPE)
Protective gloves, long sleeve shirt when handing. Launder before reuse. Wear a dust mask while mixing or loading.
Work Practices: Wear appropriate personal protective equipment.

9. Physical and Chemical Properties
Appearance: white crystalline solid.
Melting point 111 °C,
Vapor pressure: 0.01 mPa @ 20 °C
Relative density: 1.04
Partition coefficient KowlogP = 3.9 @ 20 °C
Good stability.
Soluble in xylene, acetone, methanol, chloroform; less in xylene, hexane.
Solubility (IN WATER): slightly

10. Stability and Reactivity
Conditions to avoid: None
Incompatibility (MATERIALS TO AVOID): N/A
Stability: This material is well stable in normal condition.
Hazardous Polymerization: Will not occur.

11. Toxicological Information
Acute oral LD50 (rat): male 2189 mg/kg, female 6071 mg/kg
Dermal LD50 (rat): >2000 mg/kg
Inhalation LC50 (4h): >5.9 mg/l
Skin irritation: no irritation for rabbit
Eye irritation: moderate irritation for rabbit
Carcinogenic effects: Available evidence suggests that Hexaconazole is not carcinogenic

12. Ecological and Ecotoxicological Information
Quail acute oral LD50: >4000 mg/kg
Rainbow trout LC50 (96h): 3.4 mg/l
Daphnia LC50 (48h): 2.9 mg/l
Bee LD50 (48h): >0.1 mg/bee (oral and contact)
Earthworm LC50 (41d): 414mg/kg in soil

13. Disposal Considerations
Pesticide Disposal: Pesticide wastes are slightly toxic, Incinerate all disposal material in accordance according to the local state regulations.

14. Transport Information
Not applicable.

15. Regulatory Information
Not applicable.

16. Other Information
All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.