MATERIAL SAFETY DATE SHEET

Epoxiconazole 12.5% SC

1. PRODUCT IDENTIFICATION

Common name: Epoxiconazole 12.5%SC
Chemical class: Conazole
Add: Yangpu building 24B, No.2005, Huangxing Road, Yangpu Shanghai
Phone Numbers: Tel: 86-21 5506 3225
Fax: 86-21-5506 3699

2. COMPOSITION (INFORMATION ON INGREDIENTS)

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENT</th>
<th>CAS No.</th>
<th>Purpose in the formulation</th>
<th>Proportion(w/v)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxiconazole</td>
<td>106325-08-0</td>
<td>Active ingredient</td>
<td>125g/l</td>
</tr>
<tr>
<td>(C16-18) Alkyl alcohol ethoxylate propoxylate</td>
<td>68002-96-0</td>
<td>Nonionic surfactants</td>
<td>250g/l</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), heavy arom</td>
<td>64742-94-5</td>
<td>Solvent</td>
<td>210g/l</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Solvent</td>
<td>Up to 1L</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Possible risk of irreversible effects. May cause harm to the unborn child. Possible risk of impaired fertility.

4. FIRST AID MEASURES

Inhalation: Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
Ingestion: Rinse mouth and then drink plenty of water.
Skin: Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
Eye: If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice.
First Aid Facilities: If poisoning occurs, contact a doctor or Poisons Information Centre.
Advice to Doctor: Treat symptomatically. If vomiting occurs, solvent and surfactants present may cause pulmonary pneumonitis.

5. FIRE FIGHTING MEASURES

Extinguishing Media: If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
Hazardous: If involved in a fire, the dehydrated components may emit oxides of carbon.
Combustion Products: oxides of nitrogen, hydrogen chloride and hydrogen fluoride.
Emergency Action in case of Fire: If exposed to fire, keep container cool by spraying with water. 
Protective Equipment: Breathable air apparatus should be worn when fighting a fire in which this product is involved.

6. ACCIDENTAL RELEASE MEASURES
Spills & Disposal: Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal.
Personal Protection: For appropriate personal protective equipment (PPE)
Environmental: Prevent from entering drains, waterways or sewers
Precautions: Use earthen bunds or absorbent bunding to prevent spreading of spillage

7. HANDLING AND STORAGE
HANDLING: Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers.
USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothes. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing
STORAGE: Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight.

8. EXPOSURE CONTROL/PERSONAL PROTECTION
National Exposure Standards:
The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m3; 15ppm TWA, as total hydrocarbon.
Personal Protective Equipment:
When opening the container, preparing the spray and using the prepared spray wear protective waterproof clothing, elbow-length PVC gloves, water resistant footwear and full-facepiece respirator (or goggles and half facepiece respirator).
Re-entry period: Do not enter treated area until spray has dried.
Eng. Controls: Handle in well ventilated areas, generally natural ventilation is adequate.
Hygiene Measures: After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.
After each day's use, wash contaminated clothing and safety equipment.
Requirements Concerning SpecialTraining:
NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials.

9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance: Clear beige liquid
Odour: Slight aromatic odour
Solubility in Water: Disperses in water.
Specific Gravity: (H2O=1) 1.02 - 1.08
Vapour Pressure <0.01 mPa @ 20°C for epoxiconazole
Volatile Component: 50%
Partition co-efficient, n-octanol/water: Kow Log P is 3.44 (pH7) for epoxiconazole
Flammability: Non combustible material.
Ignition Temperature: 420°C

10. STABILITY AND REACTIVITY
Stability: Stable under normal conditions.
Hazardous: Polymerization will not occur.
Hazardous Reaction: Keep away from strong oxidising agents.

11. TOXICOLOGICAL INFORMATION
Toxicology Information: No harmful effects are expected if the precautions on the label and this MSDS are followed.
Inhalation: Breathing in high concentrations of vapours or aerosols of this material may cause headache, nausea, dizziness and weakness.
Ingestion: Low toxicity. However, swallowing large amounts of concentrate may cause nausea and vomiting.
Skin: Prolonged contact with the concentrate may cause irritation.
Eye: Will irritate the eyes.
Reproductive Toxicity: Regarded as causing developmental toxicity in humans based on strong presumption from studies on rats and rabbits. Possible risk of impaired fertility based on small but significant effects on reproduction in a 2nd generation study of rats.
Carcinogenicity: Worksafe Australia has classified epoxiconazole in the occupational environment as a Carcinogen Category 3 substance. This means that the substance is not classifiable as to carcinogenicity to humans.
Acute Toxicity – Oral: LD50 (rat) >2200 mg/kg for the formulated product
Acute Toxicity - Dermal: LD50 (rat) >2000 mg/kg for the formulated product
Acute Toxicity – Inhalation: LC50 (rat) (4hr) >3.26 mg/l for the formulated product
Skin Irritation: Mild skin irritant.
Skin Sensitisation: Product is not a skin sensitisser.
Other Information: The Australian Acceptable Daily Intake (ADI) for epoxiconazole for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and
the most sensitive species.

12. ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment: The product is a marine pollutant for sea transport.

Other Precautions: Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.

Environ. Protection: Spray drift can cause damage, read the label for more information.

Acute Toxicity – Fish: The following is data for a similar product. Toxic to fish. 
LC50 (96hr) for rainbow trout is 0.5 mg/l.

Acute Toxicity – Daphnia: LC50 (48 hr) for daphnia is 1.8 mg/l for the formulated product.

Acute Toxicity – Other Organisms: The following data is for the active ingredient, oxiconazole.

Birds: Not toxic to birds. LD50 for quail is >2000 mg/kg

Bees: Not toxic to bees. LD50 >100 μg/bee.

13. DISPOSAL CONSIDERATIONS

Product Disposal: On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals

Container Disposal: Do not use this container for any other purpose. Triple rinse containers, add rinse to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. If on-site container disposal is necessary, triple rinse empty container with water, add rinsate to the spray tank. Puncture top, sides and bottom, crush and bury in an approved landfill or bury with at least 500 mm of soil cover away from pasture and crop areas, water supplies and houses. Empty containers and product should not be burnt..

14. TRANSPORT INFORMATION

Storage and Transport Considered non dangerous for transport for the Transport of Dangerous Goods by Road and Rail.

UN Number (Sea Transport): 3082

IMO Class/Packing Group: Class 9; Packing Group III

IMO Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

15. REGULATORY INFORMATION

Risk Phrase: Possible risk of irreversible effects. May cause harm to the unborn child. Possible risk of impaired fertility.

Safety Phrase: Keep away from food, drink and animal feeding stuffs. Keep out of reach of children. Wear suitable protective clothing and gloves. If swallowed, seek
medical advice immediately and show this container or label.
Packaging & Labelling: CAUTION. KEEP OUT OF REACH OF CHILDREN.
READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Hazard Category: Toxic

16. OTHER INFORMATION

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.