



Hangzhou Tianlong Biotechnology Co., Ltd.

Add: Room 1906, Fengqi Times Tower, No.338, Fengqi East Road, Hangzhou, Zhejiang, China.

MATERIAL SAFETY DATA SHEET

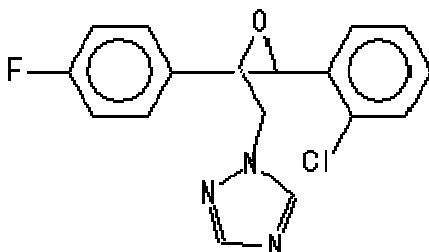
1. Chemical Product and company Identification

Product Name: Epoxiconazole

Molecular Formula: $C_{17}H_{13}ClFN_3O$

Molecular Weight: 329.8

Structural Formula:



Chemical Name: (2RS,3RS)-1-[3-(2-chlorophenyl)-2,3-epoxy-2-(4-fluorophenyl)propyl]-1H-1,2,4-triazole

CAS No.: 106325-08-0

Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD

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2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Epoxiconazole	106325-08-0	95.0
Other ingredients		5.0

3. Hazards Summarizing

Routes of Entry:

Eye contact, inhalation, ingestion

Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (corrosive, permeator). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns.

Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching.

Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:

Carcinogenic effects: Not available.

Mutagenic effects: Not available.

Teratogenic effects: Not available.

Developmental toxicity: Not available.

The substance is toxic to lungs, mucous membranes.

Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

4. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation.

Warning:

It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim

is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

5. Fire-Fighting Measures

Flammability of the Product: Not available.

Flash Points: Not available.

Fire Hazards in Presence of Various Substances: Not available.

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

Flammable liquid, soluble or dispersed in water

Small fire: Use DRY chemical powder. Large fire: Use alcohol foam, water spray or fog cool containing vessels with water jet in order to prevent pressure build –up, autoignition or explosion.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

6. Accidental Release Measures

Personal cautions: safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants and hats.

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:

Flammable liquid. Corrosive liquid.

Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

7. Handling and Storage

Precautions:

Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Never add water to this product in case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage:

Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated

place. Ground all equipment containing material. Keep container dry. Keep in a cool place.

8. Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist before handling this product.

9. Physical and Chemical Properties

Appearance: White crystal

Melting point: 136.2°C

Boiling Point: 140.99°C (285.8°F)

Specific gravity: 1.02(Water = 1)

Stability: solubility (20°C (/mg/L): in water 6.63, in acetone 14.4, in dichloromethane 29.1. Stable at normal temperature, and it will not be hydrolyzed for 12 days at pH 7-9.

Vapor Pressure: <1.0X10⁻⁵Pa (25°C).

10. Stability and Reactivity

Stability: solubility (20°C (/mg/L): in water 6.63, in acetone 14.4, in dichloromethane 29.1. Stable at normal temperature, and it will not be hydrolyzed for 12 days at pH 7-9.

Conditions to Avoid: Not available.

Hazardous Decomposition Products: Not available.

Hazardous Polymerization: Not available.

11. Toxicological Information

Toxicity to Animals:

Acute oral toxicity (LD50): 5000 mg/kg [Rat].

Acute dermal toxicity (LD50): 2000 mg/kg [Rabbit].

Chronic Effects on Humans: The substance is toxic to lungs, mucous membranes.

Other Toxic Effects on Humans:

Very hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (corrosive, permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

12. Ecological Information

Ecotoxicity: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic. Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Methods of disposal:

After use: Triple rinse empty container with water and empty contents into spray tank. Destroy the empty container by puncturing and crushing. Dispose of destroyed container by taking to an approved council disposal site or alternatively bury under at least 50cm of soil in a location away from houses, crops, water supply, and ground water.

14. Transport Information

Class: 9

UN No: 3077

Packaging Group II

15. Regulatory Information

Safety Phrases: Keep out of reach of children

Keep away from food, drink and animal feeding stuff

Do not breathe spray

When using do not eat, drink or smoke

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

In case of accident or if you feel unwell, seek medical advice immediately (Show the label where possible)

Use appropriate containment to avoid environmental contamination

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.