



Hangzhou Tianlong Biotechnology Co., Ltd.

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

MATERIAL SAFETY DATA SHEET

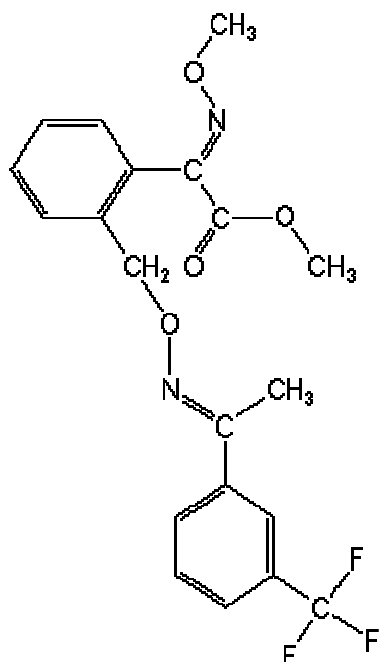
1. Chemical Product and company Identification

Product Name: Trifloxystrobin

Molecular Formula: C₂₀H₁₉F₃N₂O₄

Molecular Weight: 408.37

Molecular Structure:



Chemical Name: methyl (αE)- α -(methoxyimino)-2-[[[(1E)-1-[3-(trifluoromethyl)phenyl]ethylidene]amino]oxy]methyl]benzeneacetate

CAS No.: 141517-21-7

Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD

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2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Trifloxystrobin	141517-21-7	95.0
Other ingredients		5.0

3. Hazards Summarizing

Route of entry: Inhalation, skin, eye

Emergency overview: Caution! Causes moderate eye irritation. Harmful if absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

4. First Aid Measures

Eye Contact: If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Skin Contact: If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available).

Inhalation: If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested.

Ingestion: If swallowed, refer for medical attention, where possible, without delay. Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise.

5. Fire-Fighting Measures

Extinguishing Media: Dry chemical powder, foam, CO₂

Fire fighting instructions: Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Contain contaminated water/fire fighting water. Dike area to prevent runoff and contamination of water sources. Equipment or materials involved in pesticide fires may become contaminated. Prevent use of contaminated buildings, area, and equipment until decontaminated.

Wear self-contained breathing apparatus and protective suit.

6. Accidental Release Measures

General and Disposal: Do not walk through spilled material. Keep unauthorized people away.

Land Spill and Leaks: Small Spill: Sweep up, keeping dust to a minimum, and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

7. Handling and Storage

Handling: Handle and open container in a manner as to prevent spillage. Do not use, pour, spill or store near heat or open flame.

Storage: Do not contaminate water, food, or feed by storage or disposal. Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizer, food and feed. Store in original container and out of the reach of children, preferably in a locked area.

8. Exposure Controls/Personal Protection

Engineering controls: Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Personal Protective Equipment:

To avoid eye and skin contact, wearing the following personal protective clothing and equipment is recommended:

Eyes: Safety goggles or face shield

Clothing: Cotton overalls buttoned to the neck and wrist and a washable hat.

Gloves: Elbow length PVC gloves.

Respiratory: Respiratory protection is not normally required. If airborne concentrations are likely to exceed the exposure standard above, an AS/NZS 1715/1716 approved respirator should be worn.

Other: After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves, goggles or face shield and contaminated clothing.

9. Physical and Chemical Properties

Appearance: yellow solid powder

Melting Point: 70.9-72.9°C.

Density: 1.36 g/cm³

Vapour Pressure: 3.4 x 10⁻⁶ Pa(25°C).

Solubility: Soluble in water 610ug/L at 25°C (not effected by pH 4-10), soluble in Acetone >500 g/L, Dichloromethane >500 g/L, Ethyl acetate >500 g/L, Hexane 11 g/L, Methanol 76 g/L, Octanol 18 g/L, Toluene 500 g/L.

10. Stability and Reactivity

Stability: Stable under normal conditions.

Conditions to avoid: Exposure to moisture. Exposure to extreme heat.

Incompatibility: strong oxidizing agents acids

Hazardous decomposition products: Thermal decomposition, Hydrogen chloride (HCL), Amines, Nitrogen oxides (NO_x), Carbon monoxide.

11. Toxicological Information

Acute toxicity:

Oral (rat) LD₅₀: >500-5000mg/kg

Dermal (rat) LD₅₀: >2000-5000mg/kg

Inhalation LC₅₀: 4hr exposure to dust: >0.5-2.0 mg/l

Male/female rat: 1hr exposure to dust (extrapolated from 4 hr LC₅₀): >2.0-8.0 mg/l

Skin irritation: Moderate skin irritation (rabbit)

Eye irritation: Mild eye irritation (rabbit)

Sensitization: Guinea pig: May cause sensitization by skin contact.

Subchronic toxicity:

In a 28-day dermal toxicity study in rats, Trifloxystrobin was tolerated without local effects at doses up to and including the limit dose of 1000 mg/kg. Systemic effects were observed in males at the limit dose and included increased organ weights (liver & kidney).

Chronic toxicity:

The major organ affected from long-term exposure to Trifloxystrobin in chronic studies in mice and dogs was the liver.

Carcinogenicity: Not carcinogenic based on oncogenicity studies in rats and mice.

Reproductive & Developmental Toxicity:

REPRODUCTION: In a two generation reproduction study using rats, Trifloxystrobin was not a primary reproductive toxicant.

DEVELOPMENTAL TOXICITY: In a developmental toxicity studies using rats and rabbits, Trifloxystrobin was not a primary developmental toxicant.

Mutagenicity: Trifloxystrobin has been tested for its potential to induce gene mutation and chromosomal changes in 5 different test systems. Taken collectively, these studies demonstrate Trifloxystrobin is not genotoxic or mutagenic.

12. Ecological Information

Environmental Precautions: This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal area below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Environmental Fate: Ground Water Advisory: Several Trifloxystrobin degradates have properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

13. Disposal Considerations

Triple or, preferably, pressure rinse containers before disposal. Add rinsings to the spray tank. Do not dispose of undiluted chemicals on-site. Break, crush or puncture and bury empty containers in local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

Empty containers or product should not be burnt.

14. Transport Information

Class: 9

UN No.: 3077

Packing group: III

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.