



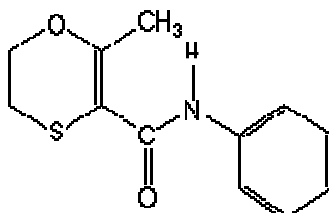
Hangzhou Tianlong Biotechnology Co., Ltd.

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

MATERIAL SAFETY DATA SHEET

1. Chemical Product Identification

Product Name: Carboxin
Molecular Formula: C₁₂H₁₃NO₂S
Molecular Weight: 235.32
Structural Formula:



Chemical Name: 5, 6-dihydro-2-methyl-1, 4-oxathiazin-3-carboxanilide

CAS No.: 5234-68-4

Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD

Address: Room 1906, Fengqi Times Tower, No.338 Fengqi East Road, Hangzhou, China, 310020

Tel: 0086-571-87214516

Fax: 0086-571-87079476

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Carboxin	5234-68-4	97.0
Other ingredient	-	3.0

3. Hazards Summarizing

More important danger for the man: none

Dangers for the environment:

Soil DT₅₀<1d(20°C), Koc71.

Physical-chemical dangers:

Not applicable

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: Ingestion slightly harmful if swallowed.

Inhalation: May be harmful if inhaled.

Chronic: Not available.

4. First Aid Measures

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20minutes. Remove contact lenses after first 5 minutes. Then continue rinsing eye. Call a Poison control Center or doctor for treatment advice.

If inhaled: remove person to fresh air. Apply artificial respiration if symptoms indicate. Call a physician.

If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20minutes Call a Poison Control Center or doctor for treatment advice.

If swallowed: Call a Poison Control Center or doctor for treatment advice. Do not induce vomiting unless told to do so by a Poison Control Center or doctor. Do not give anything by mouth to an unconscious person.

5. Fire-Fighting Measures

Fire and explosion hazards: not inflammable and not explosive

Extinguishing media: Non-combustible liquid. Use extinguishing media for underlying cause of fire.

Measures of personal protection: Chemical resistant gloves, protective clothing and eye protection should be worn when handling. Launder clothing before reuse. In the absence of adequate ventilation, use respiratory protection.

Environmental cautions

EX: prevent the contamination of the floor and of beds of water.

6. Accidental Release Measures

Personal cautions: Avoid all personal contact. Observe good personal hygiene.

Cleaning methods

Small Spills: Wear protective equipment to prevent skin and eye contamination. Contain-prevent run off into drains and waterways. Use absorbent(soil, sand or other inert material). Collect and seal in properly labelled containers for disposal. Wash area down with detergent and excess water.

Large Spills: Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Contain-prevent run off into drains and waterways. Use absorbent(soil, sand or other inert material). Collect and seal in properly labelled drums for disposal. Wash area down with detergent and excess water. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture.

7. Handling and Storage

Handling: wearing protective clothing when handling.

Storage: store in a cold and dry location, be far away from fire, heat, food and feed.

Technical protective measures: sufficient ventilation to minimize dust exposure. Protect closed dust handling systems against possible dust explosions. Avoid dust accumulations on building or equipment surfaces.
Fire and explosion protection: not inflammable.

8. Exposure Controls / Personal Protection

Personal protective equipment

Respiratory protection: approved respirator

Hand and skin protection: chemical resistant gloves and protective clothing

Eye protection: goggles

Industrial hygiene: use good industrial hygiene. Wear face shield or goggles, elbow length PVC gloves, cotton overalls buttoned to the neck and wrist, washable hat and half face respirator with dust and vapour cartridge. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

9. Physical and Chemical Properties

Appearance: Odorless powder

Boiling point: not available

Melting point : 91.5-92.5°C,98-100°C(according to crystal structure)

Relative Density: 1.36

Water solubility: in water 0.147g/L(20°C)

Other solubility: Soluble in organic solvents, such as acetone 221.2, methanol 89.33, ethyl acetate 107.7(all in g/L,20)

PH value: 7.5

Flash point: not-applicable

10. Stability and Reactivity

Reactivity: stable for at least 2 years at ambient temperatures. Stable to hydrolysis at PH 5, PH7, and PH9 (25°C), In aqueous solutions exposed to light, DT₅₀ 1.54h (PH 7, 25°C)

Conditions to avoid: In condition of heat and humidity

Hazardous decomposition products: Hydrogen cyanide, cyanide salts.

Hazardous reaction: not applicable

11. Toxicological Information

Swallowed:

Moderately toxic, Acute oral LD₅₀ (rat): =1300mg/kg

Eyes:

Eye irritation with contact.

Skin:

Low toxicity, acute dermal LD₅₀ (rat): =1050mg/kg. May cause skin irritation with prolonged exposure.

Inhaled:

Mild irritation to nose and throat.

Long term effects:

No information available.

12. Ecological Information

Aquatic Toxicity

Rainbow trout: 96 hr EC50 2.3 mg/L

Bluegill sunfish: 96 hr EC50 3.6mg/L

Daphnia magna: 48 hr EC50 57 mg/L

Terrestrial Toxicity

Mallard duck: LC50(8d) >5000mg/kg diet

Bee: Not hazardous to bees when used as directed; LD50 >181µg/bee.

Environmental Fate:

Carboxin will extensively metabolized in rats and eliminated mainly in urine and, to a lesser extent, faeces. Major metabolites in urine are p-hydroxylated carboxin sulfoxide, 4-acetamidophenol and its O-glucuronide.

13. Disposal Considerations

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. Transport Information

Class: 9

UN No: UN 3077

Packaging 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.