



Hangzhou Tianlong Biotechnology Co., Ltd.

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

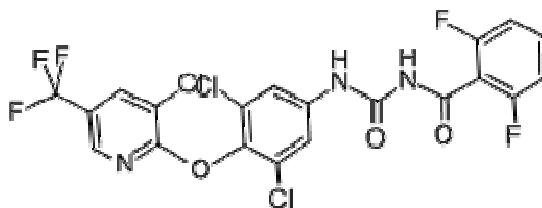
MATERIAL SAFETY DATA SHEET

1. Chemical Product and company Identification

Product Name: Chlorfluazuron

Molecular Formula: $C_{20}H_9Cl_3F_5N_3O_3$

Structural Formula:



Molecular Weight: 540.65

Chemical Name:

1-[3,5-dichloro-4-(3-chloro-5-trifluoromethyl-2-pyridyloxy)phenyl]-3-(2,6-difluorobenzoyl) urea

CAS No.: 71422-67-8

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 %
Chlorfluazuron	71422-67-8	94.0
Other ingredients		6.0

3. Hazards Identification

Component	Symbol	R phrases
Chlorfluazuron	N/A	N/A

More important danger for the man: Harmful if swallowed;

Dangers for the environment: Toxic to fish and aquatic invertebrates;

Physical-chemical dangers: Not applicable.

4. First Aid Measures

If poisoning occurs, immediately contact a doctor or Poisons Information Centre, and follow the advice given. Show this Material Safety Data Sheet to a doctor.

Eye: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for

15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: If swallowed, drink 1 or 2 glasses of water (or milk) and induce vomiting by touching the back of the throat with finger. If possible, contact a physician, Poison Control Center, or emergency center before inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Take person and product container to the nearest emergency treatment center.

Inhalation: If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Note to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-Fighting Measures

Extinguishing media: Dry chemical, foam, CO₂;

Don't use: not applicable;

Particular risk: not applicable;

Measures of personal protection: Safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants.

6. Accidental Release Measures

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

Clea ning methods

EX: Clean up spill immediately. Absorb spill with inert material (such as dry sand or earth), then place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

Environmental cautions

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

7. Handling And Storage

Handling: Avoid getting in eyes or on skin, or clothing and breathing dust. Remove contaminated clothing immediately. Wash thoroughly after handling.

Storage: Keep in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight.

Fire and explosion protection: the area must be far from fire and flammable materials.

8. Exposure Controls / Personal Protection

Personal protective equipment

Respiratory protection: approved respirator;

Protective gloves: rubber gloves;

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 vapor 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: White to red solid;

Odor: None;

Acidity (H₂SO₄): ≤0.3%

Boiling point: Not applicable;

Melting point: 222.6°C;

Density: 1.66 g/cm³;

Water solubility: 0.016 mg/l (20°C);

Flash point: Not applicable;

Ignition temperature: Not applicable.

10. Stability And Reactivity

Stability: stable under the normal conditions;

Conditions to avoid: Fire, heat and high temperature;

Products to avoid: Incompatible with strong oxidisers;

Hazardous decomposition products: Toxic, irritating fumes may be formed if product is involved in a fire.

11. Toxicological Information

Acute oral LD₅₀ for rat: 8500 mg/kg;

Acute dermal LD₅₀ for rat: >1000 mg/kg;

Inhalation LD₅₀ (4h) for rat: 2.4 mg/l;

Non-irritating to rabbit skin;

Mild irritating to rabbit eye;

Dermal sensitization: Not a sensitizer (Guinea pig).

Chronic toxicity: No studies have been undertaken on the product.

Reproductive effects: Chlorfluazuron did not interfere with reproduction in animal studies.

Teratogenic effects: Chlorfluazuron did not cause birth defects in laboratory animals.

Mutagenic effects: Chlorfluazuron has not been shown to cause changes in living cells.

Carcinogenic effects: Chlorfluazuron did not cause cancer in long-term animal studies.

Organ toxicity: None known.

12. Ecological Information

Effects on birds:

LD₅₀ for mallard duck: 2510 mg/kg;

Effects on aquatic organisms:

LC₅₀ (96h) for carp: 300 mg/l;

EC₅₀ (48h) for daphnia magna: 0.000908 mg/l.

Effects on other organisms:

LD₅₀ (48h) for bees: 100 µg/bee;

13. Disposal Considerations

Material that cannot be used at the site should be disposed of in an approved waste disposal facility following all applicable Federal, State and Local regulations. If burned, stay out of smoke. Do not contaminate water supplies by disposal of wastes or containers.

14. Transport Information

Not dangerous goods.

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 recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.