



Hangzhou Tianlong Biotechnology Co., Ltd.

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

MATERIAL SAFETY DATA SHEET

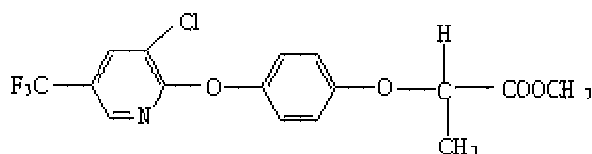
1. Chemical Product and company Identification

Product Name: Haloxyfop-p-methyl

Molecular Formula: C₁₆H₁₃ClF₃NO₄

Molecular Weight: 375.7

Structural Formula:



Chemical Name: Methyl(R)-2-[4-(3-chloro-5-trifluoromethyl-2-pyridyloxy)phenoxy]propionate

CAS No.: 72619-32-0

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 %
Haloxyfop-p-methyl	72619-32-0	95.0
Other ingredients		5.0

3. Hazards Identification

Emergency overview: Caution. Harmful if swallowed. Keep out of the reach of children. Very toxic to aquatic organisms. Avoid release to the environment.

Environment hazards: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First Aid Measures

Inhalation: If inhaled, remove to fresh air and keep at rest. Obtain medical advice. If breathing stops or shows signs of failing, start artificial respiration. If advised by doctor or Poisons Information Centre, atropine tablets may be administered.

Skin contact: Immediately remove contaminated clothing. Wash affected

areas with soap and water. Seek medical aid. If advised by doctor or Poisons Information Centre, atropine tablets may be administered.

Eye contact: Rinse eyes immediately with clean water for at least 15 minutes and obtain medical aid.

Ingestion: Wash out mouth with water. Do not induce vomiting. Give a glass of water. Keep patient at rest and seek medical advice immediately, as above. Transport patient tablets may be administered.

5. Fire-Fighting Measures

Hazardous combustion products: During a fire, possibly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing media: Use dry chemical, foam or CO₂ extinguishing media.

Fire-fighting instructions: Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

Protective equipment for fire fighters: Wear full protective clothing and self-contained breathing apparatus.

6. Accidental Release Measures

Personal precautions: Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the clean up process. Wear suitable protective clothing and equipment.

Environmental precautions: Do not allow to enter drains or water courses.

Method for cleaning up: Clean up small spills immediately, use proper personal protection. Absorb spill with absorbent material. After removal, flush contaminated area thoroughly with water containing a strong detergent. Sweep up and place in a chemical container. Seal the container and handle in an approved manner. Keep spills out of streams and domestic water supplies. Prevent contamination of local water sources. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. Dispose of all waste and rinse in the appropriate manner.

7. Handling and Storage

Handling: Read the label before use. Harmful if swallowed. Avoid inhalation and contact with eyes and skin. Use with adequate ventilation.

Do not handle broken packages without protective equipment. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet.

Remove clothing immediately if the product gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Seek medical advice. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination. Worker should shower at the end of each work day. Launder all clothing before it is reused again.

Storage: Store in original container in a dry, cool, well-ventilated area. Avoid excess heat. Not to be stored next to food stuffs and water suppliers. Keep out of reach of children, uninformed persons and animals. Do not contaminate other pesticides and fertilizers.

8. Exposure Controls/Personal Protection

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: Brown liquid

Melting Point: 174-178°C.

Vapour Pressure: 2.6×10^{-5} hPa at 20°C

Stability : is very stable to heat. No decomposition after 88. hours at 200°C.

10. Stability and Reactivity

Chemical stability: Stable under normal conditions.

Conditions to avoid: Avoid direct sunlight. Avoid fire, heat and high temperature.

Hazardous decompositions products: Carbon dioxide and if combustion is incomplete, carbon monoxide and smoke.

Hazardous polymerization: Will not occur.

Incompatible materials: Avoid oxidizing agents, alkaline substances.

Hazardous reactions: Hazardous polymerization will not occur.

11. Toxicological Information

Acute toxicity:

Oral (male rat) LD₅₀: 300mg/kg

Oral (female rat) LD₅₀: 623mg/kg

Dermal (rabbit) LD₅₀: >2000mg/kg

SKIN: No irritant to skin (rabbits).

EYES: Slightly irritating to eyes (rabbits).

Mutagenic effects: No information is currently available.

12. Ecological Information

ECOLOGICAL DATA

Birds: Acute oral (bobwhite quail) LD₅₀: 1159mg/kg

Fish: LC₅₀ (96h): for rainbow trout 0.7mg/l

Daphnia: EC₅₀ (48h): 6.12mg/l

Algae: EC₅₀: 1.72mg/l.

Bees: LD₅₀ (oral): >100ug/bee

LD₅₀ (contact): >100ug/bee

Earthworm: LC₅₀ (14 days): 1343mg/kg

13. Disposal Considerations

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals onsite. 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 500 mm 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. : 3082

Packing Group: III

15. Regulatory Information

Risk Phrase(s):

R22: Harmful if swallowed.

R50/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S22: Keep out of reach of children.

S60: This material and its container must be disposed of as hazardous waste.

S61: Avoid release to the environment.

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.