



Hangzhou Tianlong Biotechnology Co., Ltd.

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

MATERIAL SAFETY DATA SHEET

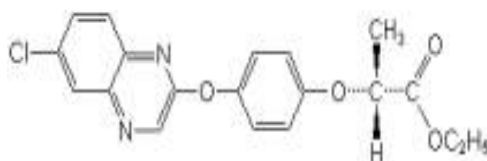
1. Chemical Product and Company Identification

Product Name: Quizalofop-P-ethyl

Molecular Formula: C₁₉H₁₇ClN₂O₄

Molecular Weight: 372.80

Structural Formula:



Chemical Name: (2R)-2-[4-[(6-chloro-2-quinoxalinyloxy)phenoxy]propanoic acid

Form: Crystal

Color: Dark amber

Odor: N/A

CAS No.: 100646-51-3

Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD

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

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2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Quizalofop-P-ethyl	100646-51-3	95.0
Other ingredients		5.0

3. Hazards Identification

Emergency Overview: Danger! Causes irreversible eye damage. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist.

4. First Aid Measures

If in Eyes: 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 treatment advice.

If on Skin Or Clothing: 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.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

5. Fire-Fighting Measures

Extinguishing Media: Water Spray, Foam, Dry Chemical, CO₂.

Fire Fighting Instructions: Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Use water spray. Cool tank/container with water spray.

6. Accidental Release Measures

Safeguards (Personnel)

Note: Review Fire-Fighting Measures and Handling (Personnel) sections before proceeding with clean-up. Use appropriate Personal Protective Equipment during clean-up. Initial Containment Dike spill. Prevent material from entering sewers, waterways, or low areas.

Spill Clean Up: Soak up with sawdust, sand, oil dry or other absorbent material. Shovel or sweep up.

Accidental Release Measures: If spill area is on ground near trees or other valuable plants remove top 2 inches of soil after initial clean up.

7. Handling and Storage

Handling (Personnel):

Do not get in eyes. Avoid breathing vapors or mist. Avoid contact with skin. Avoid contact with clothing. Wash thoroughly after handling. Wash clothing after use. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

Storage: Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place.

8. Exposure Controls/Personal Protection

Engineering Controls: Use only with adequate ventilation. Keep container tightly closed.

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: White or light gray solid

Melting point : 76-77°C

Boiling point : 220°C@26.6Pa

Optical rotation : +35.9° @20°C

Relative density : 1.36

Vapor pressure : 0.00011mPa@20°C

Partition coefficient : KowlogP=4.66@22-24°C

PH: 5.6 (1% wt/wt in water)

Solubility in Water: 0.61mg/L@20°C

10. Stability and Reactivity

Chemical Stability: Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials: None reasonably foreseeable.

Polymerization: Polymerization will not occur.

11. Toxicological Information

Animal Data

Acute Oral LD₅₀: 1210 mg/kg (rats, male)

1182 mg/kg (rats, female)

1753mg/kg(mouse,male)

1805mg/kg(mouse,female)

Low level of toxicity by ingestion.

Acute Dermal LD₅₀: > 2,000 mg/kg (rabbit)

Slightly to moderately toxic by contact.

Skin Irritation and Sensitization: Product is a moderate skin irritant; but not considered a skin sensitizer.

Inhalation 4 hour LC₅₀: 2.6 mg/L (rats, male);

4.4 mg/L (rats,female);

3.5 mg/L (rats combined)

12. Ecological Information

Acute oral LD₅₀ : mallard >2000mg/kg

Bobwhite >2000mg/kg

Toxicity to fish : LC₅₀(96h) : rainbow trout >0.5mg/L

Not toxic to bee

13. Disposal Considerations

Waste Disposal: Treatment, storage, transportation, and disposal must be in

accordance with applicable Federal, State/Provincial, and Local regulations.
Do not flush to surface water or sanitary sewer system.

Container Disposal: For Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by

burning. If burned, stay out of smoke.

14. Transport Information

Hazard Class: CLASS 9

UN No.: 3077

Packing Group: III

15. Regulatory Information

Keep locked up out of reach of children and other, unauthorized persons.

Keep away from food, drink and animal feeding stuffs.

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Do not get in eyes, on skin or on clothing. Do not breathe dust, vapor or spray mist.

In case of accident or if you feel unwell, seek medical advice immediately.

This material and its container must be disposed of in a safe way.

Do not contaminate any body of water.

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.