



Hangzhou Tianlong Biotechnology Co., Ltd.

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MATERIAL SAFETY DATA SHEET

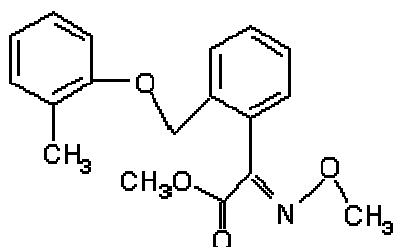
1. Chemical Product and company Identification

Product Name: Kresoxim-methyl

Molecular Formula: C₁₈H₁₉NO₄

Molecular Weight: 313.35

Molecular Structure:



Chemical Name: methyl (E)-methoxyimino[α-(o-tolyloxy)-o-tolyl]acetate

CAS No.: 143390-89-0

Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD

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2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Kresoxim-methyl	143390-89-0	95.0
Other ingredients		5.0

3. Hazards Summarizing

Potential health effects

Acute toxicity: Harmful if swallowed.

Irritation: Irritation is possible when the product comes in contact with the skin, respiratory tract or the eyes.

Potential environmental effects

Aquatic toxicity: Very toxic (acute effect) to aquatic organisms.

Terrestrial toxicity: Acutely harmful to terrestrial organisms.

4. First Aid Measures

If inhaled: Keep patient calm, remove to fresh air. Assist in breathing if necessary. Consult a physician.

If on skin: Wash affected areas thoroughly with soap and water. Remove contaminated clothing. If irritation develops, seek medical attention.

If in eyes: Hold eyelids open to facilitate rinsing. Flush with copious amounts of water for at least 15 minutes. If symptoms persist, seek

medical advice.

If swallowed: Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

5. Fire-Fighting Measures

Flash point: No data available.

Suitable extinguishing media: foam, dry extinguishing media, carbon dioxide, water spray

Hazards during fire-fighting: carbon monoxide, Carbon dioxide, if product is heated above decomposition temperature, toxic vapors will be released. The substances/groups of substances mentioned can be released if the product is involved in a fire.

Protective equipment for fire-fighting: Firefighters should be equipped with self-contained breathing apparatus and turn- out gear.

6. Accidental Release Measures

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Cleanup: Dike spillage e. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Handling

General advice:

Avoid contact with the skin, eyes and clothing.

Storage

General advice:

Keep away from heat. Protect against moisture. Protect from direct sunlight.

Storage incompatibility:

General: Segregate from foods and animal feeds.

Storage stability:

Storage duration: 24 Months

Temperature tolerance

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

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: White crystal powder

Melting Point: 87.2-101 °C.

Density: 1.258kg/L(20°C)

Vapour Pressure: 1.3×10^{-6} Pa mPa at 25°C

Solubility: Stable in water 2 g/L at 20°C

10. Stability and Reactivity

Stability: Stable under normal conditions.

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, and open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage.

Substances to avoid:

No substances known that should be avoided.

Hazardous reactions:

No hazardous reactions if stored and handled as prescribed/indicated.

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity:

Oral (rat) LD₅₀: >5000mg/kg

Dermal (rat) LD₅₀: >2000mg/kg
Inhalation (rat) LC₅₀:>5.6 mg/l (4h)
Skin irritation: No irritation (rabbit)
Eye irritation: No eye irritation (rabbit)
Sensitization: Not available

12. Ecological Information

Birds: LD₅₀ (14d) for quail >2150mg/kg
Fish: LC₅₀ (96h) in range 0.681-1.0mg/l
Bees: LD₅₀ (48h) contact >20µg/bee
Daphnia: EC₅₀ (48h) 0.186mg/l
Environmental fate:
Animals: In warm-blooded animals such as the rat, kresoxim-methyl is quickly broken down.
Plants: Residues in cereals and pome fruit at harvest are <0.05mg/kg, in grapes and vegetables <1mg/kg.
Soil/Environment: In soil DT₉₀ <3D. The main metabolite is the corresponding acid. Koc 219~372; Koc of the acid 17-24. In water DT₅₀ 34d (pH 7), 7(pH 9).

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

Risk phrase: Harmful by inhalation, in contact with skin and if swallowed.
Irritating to eyes, respiratory system and skin.
Toxic to aquatic organisms.
Safe phrase: Keep locked up and out of reach children.
Keep away from food, drink and animal feeding stuffs.
Do not breathe vapour/spray.
Avoid contact with skin and eyes.
Wear suitable protective clothing, gloves and eye/face protection.

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.