



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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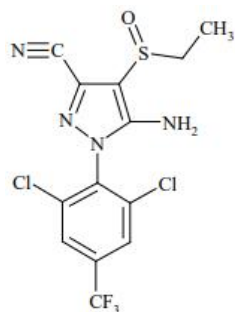
1. Chemical Product Identification

Product Name: Ethiprole 96% TC

Molecular Formula: C₁₃H₉Cl₂F₃N₄OS

Molecular Weight: 397.20 g/mol

Structural Formula:



Chemical Name: 5-amino-1-(2,6-dichloro- α,α,α -trifluoro-p-tolyl)-4-ethylsulfinylpyrazole-3-carbonitrile

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Ethiprole	181587-01-9	96.0
Other ingredients	--	4.0

3. Hazards Identification

Pictogram:



Signal Word: Warning

Hazard statement(s):

H373: Causes damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement(s):

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P270: Do not eat, drink or smoke when using this product.

P319: Get medical help if you feel unwell.

P391: Collect spillage.

P501: Dispose of contents/container to an approved waste disposal plant.

4. First Aid Measures

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 physician or poison control center immediately.

Skin: Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Ingestion: Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Inhalation: Move to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

5. Fire-Fighting Measures

Fire and explosion hazards: Do not use or store near heat or open flame. Do not use this product in or on electrical equipment due to the possibility of shock hazard.

Suitable extinguishing media: Carbon dioxide, dry chemical, foam or water.



Fire fighting instructions: As in any fire, wear self- contained breathing apparatus pressure-demand.

6. Accidental Release Measures

Personal precautions: Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice: Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

7. Handling And Storage

Handling Procedures: Do not get on skin or on clothing. Avoid breathing capor or spray mist and contact with eyes. Do not use near heat or open flame. Do not use this product in or on electrical equipment.

Storing Procedures: Do not contaminate water, food or feed by storage. Store upright at room temperature. Avoid exposure to extreme temperatures, Do not store near heat or open flame.

Work/Hygienic Procedures: Wash thoroughly with soap and water after handing. Remove contaminated clothing and wash before reuse.

8. Exposure Controls / Personal Protection

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT: No special equipment is usually needed when handling small quantities. Use the following instruction when handling bulk.

Respirator: An approved full-face respirator suitable for protection from spray or mists of pesticides is required. Limitations of respirator use specified by the approved agency and the manufacturer must be observed.

Clothing: Employee must wear appropriate protective (impervious) clothing; boots, hat and



equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

Gloves: Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

Eye protection: The use of chemical resistant goggles or face shield. Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9. Physical And Chemical Properties

Appearance: White to Off-White Solid

Odor: Odourless

Melting point: No melting point observed before decomposition at 165.5°C

Vapour pressure: 9.1×10^{-8} Pa at 20°C

Octanol-water partition coefficient: Log P= 1.99 (at pH 7, 20°C)

Solubility: 9.2 g/L in water (20°C); In organic solvents: 90.7 g/l in acetone, 47.2 g/l in methanol, 24.0 g/l in ethyl acetate (all at 20°C)

10. Stability And Reactivity

Chemical stability: Stable.

Conditions to Avoid: Excessive heat and fire.

Incompatible Materials: Strong oxidizing agents, Strong bases.

Hazardous Decomposition Products: Oxides of carbon, chlorine and hydrogen chloride may be formed in a fire situation.

Hazardous Polymerization: Hazardous polymerization does not occur.

11. Toxicological Information

Acute oral LD₅₀ for rat: 7080 a.i.mg/kg.

Acute dermal LD₅₀ for rabbit: >2000 a.i.mg/kg.

Acute inhalation LC₅₀ (4 h) for rat: >5.2 a.i.mg/L.

Skin irritation: Non-irritating to skin (rabbits).

Eye irritation: Non-irritating to eyes (rabbits).

Skin sensitization: Not a skin sensitiser (guinea pigs).



12. Ecological And Ecotoxicological Information

Effect on birds: very low acute and subchronic toxicity to birds.

Effect on fish: low acute toxicity to fish.

Effect on aquatic invertebrates: low acute and chronic toxicity to daphnia.

13. Disposal Considerations

Disposal methods: Check government regulations and local authorities for approved disposal of this material. Dispose of in accordance with applicable laws and regulations.

Pesticide disposal: Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product that cannot be reused or reprocessed should be disposed of in a landfill approved for pesticide disposal. Do not contaminate rivers, dams or any other water sources with the product or used containers. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Comply with local legislation applying to waste disposal.

Container disposal: Emptied containers may retain vapour and product residue. Observe all labeled safeguards until container is cleaned or destroyed. Triple or pressure rinse empty containers. Pour rinse water into formulation tank. Store for collection by approved waste disposal service. Dispose of as non hazardous industrial waste. Do not re-use containers. Disposal of waste and packaging materials must always be in accordance with all applicable local laws / regulations.

14. Transport Information

Not applicable

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



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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.