



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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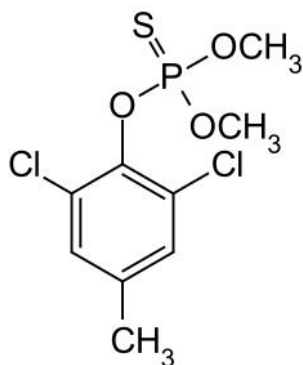
1. Chemical Product Identification

Product Name: Tolclofos-methyl TC

Molecular Formula: C₉H₁₁Cl₂O₃PS

Molecular Weight: 301.1 g/mol

Structural Formula:



Chemical Name: *O*-2,6-dichloro-*p*-tolyl *O,O*-dimethyl phosphorothioate

Form: Solid

Color: Off-white.

Odor: Faint odor (characteristic).

CAS No.: 57018-04-9

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Tolclofos-methyl	57018-04-9	95.0
Other ingredients	--	5.0



3. Hazards Identification

3.1 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H400

3.2 GHS label elements, including precautionary statements

Picogram	
Signal word	Warning
Hazards statments	H410 Very toxic to aquatic life with long lasting effects
Precautionary statemnts	P273 Avoid release to the environment. P391 Collect spillage P501 Dispose of contents/ container to an approved waste disposal plant

4. First Aid Measures

Inhalation: Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult: give oxygen. If not breathing: apply artificial respiration.

Get medical attention.

Ingestion: Induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Consult a doctor.

Skin contact: Remove contaminated clothing. Wash off with plenty of water and soap. Consult a doctor in the event of any complaints.

Eye contact: Wash off with plenty of water for at least 15 minutes. If pain persists, consult an eye specialist.

Notes to a physician: There is no specific antidote. Treat symptomatically and give supportive therapy. If ingested perform gastric lavage and administer activated charcoal.

5. Fire-Fighting Measures

Extinguishing media: Small fire: Use dry chemical, carbon dioxide, water spray or foam (alcohol resistant foam is preferred fire fighting medium, but, if it is not available, normal foam can be used). Large fire: Use water spray, fog or foam (alcohol resistant foam is



preferred fire fighting medium, but, if it is not available, normal foam can be used)..

Hazardous decomposition products: May form toxic materials such as: Carbon monoxide, etc. hydrogen chloride, hydrogen sulfide, oxides of phosphorous, Oxides of sulfur,

Fire-fighting procedures: Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Wear suitable protective clothing and eye/face protection.

6. Accidental Release Measures

Action to take for spills: Collect spilled material with shovel, place into a clean container and cover container loosely. Avoid contact, isolate area and keep animals and unprotected persons. Confine spills.

Personal Precautions: Use appropriate protection

Environmental Precautions: Dispose of this material and its container at hazardous or special waste collection point. If the product has contaminated surface water, inform the appropriate authorities.

7. Handling And Storage

Handling: Avoid generation of dust. Do not breathe dust. Avoid contact with skin and eyes.

Storage: Keep locked up. Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Keep container dry.

8. Exposure Controls/Personal Protection

Engineering measures: Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Hygiene measures: Wash hands thoroughly after handling. Wash clothing separately before re-use.

Respiratory system: During spraying wear suitable respiratory equipment.

Skin and body: Wear suitable protective clothing and chemical resistant boots.

Hands: Wear suitable gloves.



Eyes: Safety goggles or face shield.

9. Physical and Chemical Properties

Appearance: Off white powder

Melting point: 78-80° C

Boiling point (° C): Decomposes before boiling

Bulk density: 0.2 – 0.3

Vapor Pressure: 57mPa@20° C

Partition coefficient: KowlogP=4.65@25° C

Solubility in water (at 25 ° C): 1.10mg/l

PH value: < 0.2% (as H₂SO₄)

10. Stability and Reactivity

Stability: Stable under normal dry conditions.

Conditions to avoid : Protect from (sun)light, open flame sources of heat and humidity.

Materials to avoid: Strong oxidizing agents

Hazardous reactions: Hazardous polymerization will not occur.

Hazardous decomposition products: Carbon monoxide, etc. hydrogen chloride, hydrogen sulfide, oxides of phosphorous, Oxides of sulfur,

11. Toxicological Information

Acute toxicity

Acute oral LD₅₀ for rat (male): >5000 a.i.mg/kg

Acute dermal LD₅₀ for rat: >5000 a.i.mg/kg.

Inhalation LC₅₀ (4 h) for rat: >3.32 a.i. mg/L.

Skin irritation: Non irritating (rabbit).

Eye irritation: Non irritating (rabbit).

Sensitization: Not a skin sensitiser (guinea pigs).

12. Ecological And Ecotoxicological Information

Effect on birds: low toxicity to birds, acute oral LD₅₀ for Bobwhites quail is > 5000 a.i.mg/kg.

Effect on fish: moderate toxicity to fish, acute 96 hour LC₅₀ for Rainbow



trout is 0.69 a.i.mg/L.

Effect on aquatic invertebrates: moderate toxicity to aquatic invertebrates, acute 48 hour EC50 for Daphnia magna is 48 a.i.mg/L.

Effect on algae: moderate toxicity to algae, acute 72 hour EC50 for Scenedemus subspicatus is 0.78 a.i.mg/L.

Effect on honeybees: low toxicity to honeybees, contact acute 48 hour LD50 is >100 a.i.µg/bee.

Effect on earthworms: moderate toxicity to earthworms, acute 14 day LC50 for Eisenia foetida is >500 a.i.mg/kg.

13. Disposal Considerations

Must be dumped or incinerated in accordance with local regulations.

Contaminated packaging:

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

Contaminated packaging should be emptied as far as possible and disposed of in accordance with official regulations after being thoroughly cleaned.

Uncontaminated packaging may be treated as household waste.

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 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



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