



## MATERIAL SAFETY DATA SHEET

### Manufacturer/information service:

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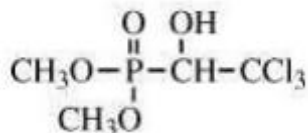
### 1. Chemical Product Identification

Product Name: Trichlorfon 97% TC

Molecular Formula: C<sub>4</sub>H<sub>8</sub>Cl<sub>3</sub>O<sub>4</sub>P

Molecular Weight: 257.4 g/mol

Structural Formula:



Chemical Name: dimethyl (*RS*)-2,2,2-trichloro-1-hydroxyethylphosphonate

Form: solid

Color: white

Odor: with organophosphate odor

CAS No.: 52-68-6

### 2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Trichlorfon	52-68-6	97.0
Other ingredients		3.0

### 3. Hazards Identification



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Harmful if swallowed. Irritating to skin and mucous. It may cause sensitization by skin contact. Typical signs and symptoms of organophosphorus poisoning may occur rapidly with overexposure (weakness, headache, vomiting, excessive sweating and salivation. Pinpoint pupils; in severe cases, convulsions, unconsciousness and death due to respiratory paralysis). Moderately toxic for birds and fish; highly toxic for arthropods.

#### **4. First Aid Measures**

Contact with Skin: Remove and wash contaminated clothing; wash with plenty of water and soap. Obtain medical attention if necessary.

Contact with eyes: Flush with plenty of clean tap water or at least 15 minutes, asking the victim to move them in all directions. If irritation persists, obtain medical attention immediately.

Inhalation: In case of signs and symptoms remove from contaminated area, to fresh air and ask for medical attention.

Ingestion: Induce vomit, provided the victim is conscious. Get medical attention immediately.

#### **5. Fire-Fighting Measures**

Suitable extinguishing agents: Alcohol-resistant foam or dry powders.

Extinguishing agents not to be used: Do not use water in order to avoid polluted runoff from the site.

Special measures: Do not spill the extinguishing agents to soil, water or sewers.

Personal protection: Always wear protective clothing and self-contained breathing apparatus.

#### **6. Accidental Release Measures**

Personal precautions: Keep unnecessary people away; isolate spill area and deny entry. Avoid skin contamination and inhalation of the product; stay upwind. Ventilate closed spaces before entering.

Precautions for environmental protection: Prevent spillages from getting into sewers, cellars or soil. Cleanup methods: Adsorb spill with sand, sawdust, diatom soil, etc; sweep up and place the sweepings in a closeable, impervious container, labeled to transfer it to a safe place for disposal.



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## **7. Handling And Storage**

Handling: Containers and packages containing this pesticide will be handed carefully, so as to avoid spillages and breakings Store in original container, preferably in a locked area, away from children, feed, food. Do not heat above 55°C. Decomposes rapidly above 100°C, explosion may be induced.

## **8. Exposure Controls / Personal Protection**

Engineering controls: Local exhaust or general ventilation to maintain exposure below PEL.

Personal Protective Equipment (PPE)

Eye/Face Protection: Chemical safety goggles

Hand/Skin Protection: Rubber, plastic or latex gloves. Long-sleeved shirt and pants or body coveralls.

Respiratory Protection: Dust/Mist filtering respirator a niosh approved respirator with any N>R>P or HE filter.

Work Practices: Wear appropriate personal protective equipment.

## **9. Physical And Chemical Properties**

Form: solid

Color: white

Odor: with organophosphate odor

Melting point: 75-79°C

Boiling point: Decomposes before boiling

Specific gravity: 1.73

Vapour pressure: 0.21 m pa at 25°C

## **10. Stability And Reactivity**

Conditions to avoid: Do not heat above 55°C.

Incompatibility (materials to avoid): None.

Hazardous Decomposition Products: Thermal decomposition (e.g. fire) may produce dimethyl sulfide, sulfur dioxide, carbon monoxide, carbon dioxide, phosphorus pentoxide, nitrogen oxides.

Stability: This material is stable in normal condition.

Hazardous Polymerization: Will not occur.



## 11. Toxicological Information

Acute oral LD<sub>50</sub> for rat: 212 a.i.mg/kg.

Acute dermal LD<sub>50</sub> for rat: >5000 a.i.mg/kg.

Inhalation LC<sub>50</sub> (4 h) for rat: >0.53 a.i.mg/L.

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

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

Skin sensitization: Mild skin sensitization can be expected(guinea pigs).

## 12. Ecological And Ecotoxicological Information

Effect on birds: high toxicity to birds, acute oral LD<sub>50</sub> for *Colinus virginianus* >36.8 a.i.mg/kg.

Effect on fish: moderate toxicity to fish, acute 96 hour LC<sub>50</sub> for Rainbow trout is 0.7 a.i.mg/L.

Effect on aquatic invertebrates: high toxicity to aquatic invertebrates, acute 48 hour EC<sub>50</sub> for *Daphnia magna* is 0.00096 a.i.mg/L.

Effect on algae: moderate toxicity to algae, acute 72 hour EC<sub>50</sub> for *Scenedemus subspicatus* is 10 a.i.mg/L.

Effect on honeybees: high toxicity to honeybees, oral acute 48 hour LD<sub>50</sub> >0.4 a.i.µg/bee.

## 13. Disposal Considerations

Pesticide Diaposal: Pesticide wastes are toxic, Incinerate all disposal material in accordance according to the local state 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



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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.