

Tel: +86-577-88905587,88908857 Fax: +86-577-88905567

EMAIL: info@rayfull.com sales@rayfull.com

MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

ZHEJIANG RAYFULL CHEMICALS CO.,LTD

ADD: NO.52 PUCHANG ROAD, PUZHOU INDUSTRIAL PARK, LONGWAN DISTRICT,

WENZHOU ZHEJIANG P.R. CHINA

Tel: +86-577-88905587 Fax: +86-577-88905567

Email: info@rayfull.com sales@rayfull.com

1. Chemical Product Identification

Product Name: Azamethiphos 98% TC

Molecular Formula: C₉H₁₀ClN₂O₅PS

Molecular Weight: 324.68

Structural Formula:

$$\begin{array}{c|c}
O & O & CH_3 \\
\hline
O & CH_5 \\
\hline
O & CH_5 \\
\end{array}$$

Chemical Name: S-6-chloro-2,3-dihydro-2-oxo-1,3-oxazolo[4,5-b]pyridin-3-ylmethyl

O,O-dimethyl phosphorothioate (IUPAC)

Form: Crystalline solid

Color: Off-white

Odor: Special foul odor. CAS No: 35575-96-3

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Azamethiphos	35575-96-3	98.0
Other ingredients		2.0

Tel: +86-577-88905587,88908857 Fax: +86-577-88905567

EMAIL: info@rayfull.com sales@rayfull.com

3. Hazards Identification

May be fatal if swallowed. Harmful if absorbed through skin. Cause substantial but

temporary eye injury.

4. First Aid Measures

If you have breathing problems or if you have felt persistently unwell after using a product

containing an organophosphorus compound, you should consult your doctor before working

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

immediately. Tell the doctor you have been using Azamethiphos which contains

azamethiphos, an organophosphorus compound.

Ingestion: In the case of ingestion, gastric aspiration followed by lavage should be preferably

performed within 1 hour of ingestion. Activated charcoal may be effective for

organophosphorus pesticides.

Inhalation: In massive overdoses, acute respiratory failure may occur. It is important to keep

the airway open and to prevent spiration if nausea and vomiting occur. Oxygen should be

administered early if necessary. The patient must be watched constantly and respiratory

support should be instituted if necessary.

Eye Contact: Wash eyes for 15 to 20 minutes with running water. And then go to see the

doctor immediately.

Skin Contact: The area should be washed carefully with soap and water. First-aid personnel

should wear rubber or plastic gloves to avoid contamination, which should be changed

frequently.

5. Fire-Fighting Measures

Extinguishing media:

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam. Specific

Hazard(s): Emits toxic fumes under fire conditions.

Specials protective equipment for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin

and eyes.

6. Accidental Release Measures

Procedure(s) of personal precaution(s):



Tel: +86-577-88905587,88908857 Fax: +86-577-88905567

EMAIL: info@rayfull.com sales@rayfull.com

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for cleaning up:

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7. Handling And Storage

Handling: Do not apply to humans, their clothing, or bedding. Do not contaminate food or use on household tanks.

Storage: Store at normal temperatures, away from children, domestic animals, food and feed products, seed and fertilizer. Do not contaminate other stored products or the storage area by handling or storage of this product. Keep in a well-ventilated room.

8. Exposure Controls / Personal Protection

Personal protective equipment

Respiratory protection: Approved respirator

Protective gloves: Rubber gloves

Eye protection: Safety goggles or face shield.

Industrial hygiene: Adequate ventilation.

9. Physical And Chemical Properties

Appearance: Off-white crystalline Solid

Melting point: 89~90°C (a.i.)

Boiling point: Decomposes before boiling.

Flash point: 150°C

Density: approx. 1.60 g/cm³ at 20°C

Water solubility: 1.1 g/L in water at 20°C.

Organic solubility: 610 g/L in Dichloromethane, 130 g/L in Benzene, 100 g/L in Methanol,

5.8 g/L in n-Octanol, at 20°C.

Vapour pressure: 0.0049×10^{-3} pa at 20° C.

pH: Not applicable.

10. Stability And Reactivity

Stability: Stable at room temperature.



Tel: +86-577-88905587,88908857 Fax: +86-577-88905567

EMAIL: info@rayfull.com sales@rayfull.com

Hazardous polymerization: Will not occur.

Conditions to avoid: Oxidizing agents.

Combustion products of dry material: Thermal decomposition may produce carbon monoxide, carbon dioxide, and nitrogen oxides, Hydrogen chloride gas, Sulfur oxides,

Hydrogen sulfide gas, Phosphorous oxides.

11. Toxicological Information

Acute oral LD₅₀ for rats is 1180 mg/kg.

Acute dermal LD₅₀ for rats is >2150 mg/kg.

Acute inhalation toxicity LC₅₀ (4 h) for rats is >0.56 mg/l.

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

Eye irritation: Slightly irritating to eyes (rabbits).

Skin sensitization for guinea pig: Not a skin sensitiser.

12. Ecological And Ecotoxicological Information

Effect on birds: Acute oral LD₅₀ for Bobwhite quail is >30.2 mg/kg.

Effect on fish: Acute LC₅₀ (96 h) for Rainbow trout is >0.115 mg/l.

Effects on aquatic invertebrates: Acute EC₅₀ (48 h) for Daphnia magna is 0.00067 mg/l.

Effects on bees: Contact acute (48 h) LD₅₀ is $>0.10 \mu g/bee$.

13. Disposal Considerations

Disposal: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14. Transport Information

hazard class: 9

UN Number: 3077

Packing group: III

15. Regulatory Information

Not applicable





Tel: +86-577-88905587,88908857 Fax: +86-577-88905567

EMAIL: info@rayfull.com sales@rayfull.com

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.