



ZHEJIANG RAYFULL CHEMICALS CO., LTD

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

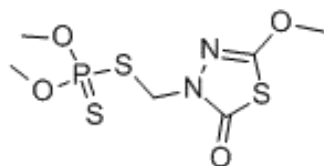
1. Chemical Product Identification

Product Name: Methidathion 25% WP

Molecular Formula: $C_6H_{11}N_2O_4PS_3$

Molecular Weight: 302.33 g/mol

Structural Formula:



Chemical Name: Phosphorodithioic acid S-2,3-dihydro-5-methoxy-2-oxo-1,3,4-thiadiazol-3-ylmethyl O,O-dimethyl ester

Form: Powder

Color: Off-White

Odor: No data available

CAS No.: 950-37-8

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Methidathion	950-37-8	25
Other ingredients		75

3. Hazards Identification



Inhalation: Cough. Very toxic by inhalation.

Skin contact: Toxic in contact with skin..

Eyes contact: Risk of serious damage to eyes.

Ingestion: Very toxic if swallowed.

4. First Aid Measures

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin contact: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

Eyes contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Fire-Fighting Measures

Extinguishing media:

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture:

Carbon oxides, nitrogen oxides (NO_x), Sulphur oxides, Oxides of phosphorus

Advice for firefighters:

Wear self contained breathing apparatus for fire fighting if necessary.

Further information:

no data available

6. Accidental Release Measures

Consult an expert! Collect leaking and spilled liquid in sealed containers as far as possible.

Absorb remaining liquid in sand or inert absorbent and remove to safe place. Sweep spilled substance into dry, sealed containers. Carefully collect remainder, then remove to safe place (extra personal protection: P3 filter respirator for toxic particles).



7. Handling And Storage

Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Storage: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. Exposure Controls/Personal Protection

Repeated or prolonged contact with skin may cause dermatitis, abnormalities and loss of fingernails. Lungs may be affected by repeated or prolonged exposure to the aerosol.

Ingestion: Prevent eating, drinking, Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with and eyewash facility and a safety shower.

Skin Contact: wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits.

9. Physical and Chemical Properties

Appearance: Off-White powde

Suspensibility: $\geq 85\%$

Wetting time: $\leq 60s$

pH: 4.0-8.0

10. Stability and Reactivity

Reactivity: no data available

Chemical stability: no data available

Possibility of hazardous reactions: no data available

Conditions to avoid: no data available

Incompatible materials: Strong oxidizing agents, Corrodes metal

Hazardous decomposition products: Other decomposition products - no data available

11. Toxicological Information

Acute Toxicity/Irritation Studies

Ingestion: Highly toxic



Oral LD₅₀ (rat): 56 mg/kg body weight

Dermal: Slightly toxic

Dermal LD₅₀ (rabbit): 2020 mg/kg body weight

Inhalation: Moderately toxic

Inhalation LC₅₀ (rat): between 0.28 and 1.32 mg/L air – 4 hours

Eye Contact: Corrosive on contact (rabbit)

Skin Contact: Moderately irritating (rabbit)

Skin Sensitization: Not a sensitizer (Guinea pig)

Mutagenic Potential

Methidathion: None observed

Reproductive Hazard Potential

Methidathion: Reproductive: Impaired mating performance, decreased pup weights and viability at high doses (rats)

Teratogenic: None observed

Chronic/Subchronic Toxicity Studies

In long term feeding studies with mice, rats and dogs, high doses of Methidathion Technical caused hepatotoxic effects. In mice, lifetime feeding at high doses produced liver tumors. In mice, lifetime feeding at high doses produces liver tumors. In a reproductive study with rats, cholinesterase inhibition caused impaired mating performance, decreased pup body weights and decreased pup viability at the highest dose level administered.

Methidathion was not teratogenic in rats or rabbits, and various mutagenicity studies show that Methidathion is not genotoxic.

12. Ecological And Ecotoxicological Information

Summary of Effects

Methidathion: Highly toxic to fish and wildlife

Eco-Acute Toxicity

Methidathion: Oral LD₅₀ (Mallard) is 28 mg/kg

8-day Dietary LC₅₀ (Bobwhite) is 224 ppm

8-day Dietary LC₅₀ (Mallard) is 43 ppm

Eco-Chronic Toxicity

Methidathion: Life Cycle MATC >0.00072 and <0.0013 mg/L

(Invertebrate, *Daphnia magna*)



Reproduction NOEC (Mallard) is 30 ppm

Reproduction NOEC (Bobwhite) is 30 ppm

13. Disposal Considerations

Additional inform.: Methidathion is rapidly adsorbed and de-activated in soil. Observe all federal state and local environmental regulations. Permitted for hazardous 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 sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.