



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

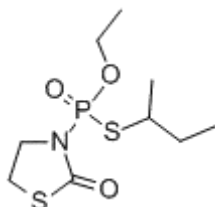
1. Chemical Product Identification

Product name: Fosthiazate 85%TC

Molecular formula: C₉H₁₈NO₃PS₂

Molecular weight: 283.35 g/mol

Structural formula:



Chemical name:

(*RS*)-[*S*-(*RS*)-sec-butyl O-ethyl 2-oxo-1,3-thiazolidin-3-yl]phosphonothioate]

2. Composition / Information on Ingredients

Name of Component	CAS No.	Content
Fosthiazate	98886-44-3	85% min
Other		15% max

3. Hazards Identification

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

H317 May cause an allergic skin reaction.



H331 Toxic if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

4. First Aid Measures

Inhalation: remove victim to fresh air. If not breathing, give artificial respiration, preferable mouth to mouth. Get medical attention.

Skin contact: wash affected area with soap and water. If irritation persists, see a physician.

Eyes contact: Flush with plenty of water for 15 minutes. Call a physician immediately.

Ingestion: Call a physician or the poison control center immediately. Drink one or two glasses of water and induce vomiting by touching the back of the throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

5. Fire-Fighting Measures

Extinguishing Media: Foam, CO₂ or dry chemical

Fire/Explosion Hazards: Slightly combustible. This material may support combustion at elevated temperatures.

Fire Fighting procedures: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

Hazardous decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride, and hydrogen fluoride.

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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide on fire, wear self contained breathing apparatus for fire fighting if necessary.



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: When 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: Light brown viscous liquid;

pH: 5.0-5.4;

Water content: $\leq 0.5\%$;

Insoluble in acetone: $\leq 0.5\%$.

10. Stability And Reactivity

Incompatible materials: Strong oxidizing agents.

11. Toxicological Information

Acute oral toxic: LD₅₀ for rat 57 mg/kg;

Acute dermal toxic: LD₅₀ for rat 853 mg/kg;

Acute inhalation toxic: LC₅₀ for rat 0.56 mg/L;

Skin irritation: Non irritation for rabbit

Eye irritation: Mild irritation for rabbit

Sensitizing to skin (guinea pigs)

12. Ecological And Ecotoxicological Information

Effect on birds: high toxicity to birds, acute LD₅₀ for Bobwhite quail is 10 a.i.mg/kg.

Effect on fish: low toxicity to fish, acute 96 hour LC₅₀ for Rainbow trout is 114 a.i.mg/L.

Effect on aquatic invertebrates: moderate toxicity to aquatic invertebrates, acute 48 hour



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EC₅₀ for Daphnia magna is 0.282 a.i.mg/L.

Effect on algae: moderate toxicity to algae, acute 72 hour EC₅₀ for Anabaena flos-aquae is >4.51 a.i.mg/L.

Effect on honeybees: high toxicity to honeybees, contact acute 48 hour LD₅₀ is 0.256 a.i.µg/bee; Oral acute 48 hour LD₅₀ is 0.61 a.i.µg/bee.

Effect on earthworms: moderate toxicity to earthworms, acute 14 day LC₅₀ is 209 a.i.mg/kg.

13. Disposal Considerations

Disposal Method: Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environment laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

Empty Container: Completely empty package into application equipment. Then dispose of empty package in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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.