

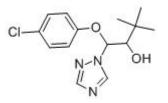
Tel: +86-577-88905587,88908857 Fax: +86-577-88905567 EMAIL: info@rayfull.com sales@rayfull.com

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: Triadimenol TC Molecular Formula: C₁₄H₁₈ClN₃O₂ Molecular Weight: 295.76 g/mol Structural Formula:



Chemical Name:

(1RS,2RS;1RS,2SR)-1-(4-chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl) butan-2-ol Form: Solid Color: White to grey Odor: Odorless CAS No.: 55219-65-3

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Triadimenol	55219-65-3	95.0
Other ingredients		5.0

3. Hazards Identification



Tel: +86-577-88905587,88908857 Fax: +86-577-88905567 EMAIL: info@rayfull.com sales@rayfull.com

Statement of Hazardous Nature

This product is classified as: Xi, Irritating. T, Toxic, N, Dangerous to the environment.

Hazardous according to the criteria of SWA.

Not dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

SUSMP Classification: S6

ADG Classification: Not applicable.

UN Number: Not applicable

GHS classification:

Reproductive toxicity : Category 1B

Specific Target Organ Toxicity (resp) - Single Exposure Category 3

Hazardous to aquatic environment Short term/Chronic Category 3

GHS Signal Words: DANGER

Hazard Statements :

H227: Combustible liquid H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H360: May damage fertility or the unborn child.

H402: Harmful to aquatic life.

General Precautionary Statements :

P102 : Keep out of reach of children

P103 : Read label before use.

Pictograms :



Precautionary statements Prevention:

P102: Keep out of reach of children.

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P261: Avoid breathing fumes, mists, vapours or spray.

P262: Do not get in eyes, on skin, or on clothing.



Tel: +86-577-88905587,88908857 Fax: +86-577-88905567 EMAIL: info@rayfull.com sales@rayfull.com

- P264: Wash contacted areas thoroughly after handling.
- P271: Use only outdoors or in a well ventilated area.
- P273: Avoid release to the environment.
- P280: Wear protective gloves, protective clothing and eye or face protection.

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 Combustible: Water fog, foam, carbon dioxide or dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazard from combustion products: Fire decomposition products from this product may be toxic if inhaled. : hydrogen chloride, hydrogen cyanide, carbon monoxide, nitrogen oxides. The major hazard in fires is usually inhalation of heated toxic or oxygen deficient (or both), fire gases.

Precautions for fighting fires: There is little risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should take care and appropriate precautions. Any explosion will likely spread the fire to surrounding materials. Water spray may be used to cool drums involved in a fire, reducing the chances of an explosion. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash



Tel: +86-577-88905587,88908857 Fax: +86-577-88905567 EMAIL: info@rayfull.com sales@rayfull.com

back considerable distances. Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. If it can be done safely remove intact containers from the fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire residues and contaminated fire extinguishing water in accordance with local regulations. Do not release contaminated water into the environment.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. Handling And Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Keep out of reach of children. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in a cool, well ventilated area, in the original container. Check containers periodically for leaks

8. Exposure Controls/Personal Protection



Tel: +86-577-88905587,88908857 Fax: +86-577-88905567 EMAIL: info@rayfull.com sales@rayfull.com

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day. Respiratory system: Wear appropriate respirator when ventilation is inadequate.

Skin and body: Lab coat.

Hands: Gloves

Eyes: Safety glasses.

9. Physical and Chemical Properties

Appearance: White powder Melting point: 132.5° C Boiling Point: Decomposes before boiling Solubility in water: 72 mg/L Vapor Pressure: 0.0005mPa at 20°C Bulk density: 1.27g/ml Partition coefficient : Kow logP=3.18 (pH7; 22 °C) Acidity(H₂SO₄): \leq 0.5% Flash point: Not expected to self ignite; Not highly flammable

10. Stability and Reactivity

Chemical stability: Stable under normal conditions of use and storage.
Conditions to avoid: Extremes of temperature and direct sunlight.
Incompatible materials: Acids, bases, oxidising agents, reducing agents.
Hazardous decomposition products: No decomposition products expected under normal conditions of use.

Hazardous reactions: Does not polymerise.

11. Toxicological Information

Acute oral LD50 for rats is 721 a.i.mg/kg. Acute dermal LD50 for rats is >5000 a.i.mg/kg. Acute inhalation toxicity LC50 (4h) for rats is 4.5 a.i.mg/L. Skin irritation: Non-irritating to skin (rabbits).





Tel: +86-577-88905587,88908857 Fax: +86-577-88905567 EMAIL: info@rayfull.com sales@rayfull.com

Eye irritation: Non-irritating to eyes (rabbits). Skin sensitization for guinea pig: Not sensitizing

12. Ecological And Ecotoxicological Information

Effect on birds: Acute oral LD50 for Bobwhite quail is >2000 mg/kg. Effect on fish: Acute LC50 (96 h) forRainbow trout is 21.3 mg/l. Effects on aquatic invertebrates: Acute EC50 (48 h) for Daphnia magna is 51mg/l. Effects on algae: Acute 72 hour EC50 for Pseudokirchneriella subcapitata is 9.6 mg/l. Effects on bees: contact acute 48 hour LD50 is >200 µg/bee, oral acute 48 hour LD50 is >224.8 µg/bee.

Effects on earthworms: Acute 14 day LC50 is >390.5 mg/kg.

13. Disposal Considerations

This product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used containers. Triple or preferable pressure rinse containers before disposal. Add rinsings to the mixing tank. Do not dispose of undiluted chemical onsite. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

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



Tel: +86-577-88905587,88908857 Fax: +86-577-88905567 EMAIL: info@rayfull.com sales@rayfull.com

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.