



## 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

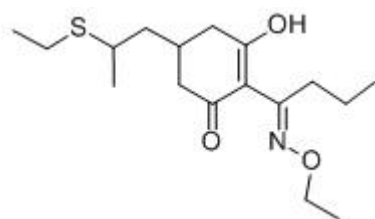
### 1. Chemical Product Identification

Common Name: Sethoxydim 95% TC

Molecular Formula: C<sub>17</sub>H<sub>29</sub>NO<sub>3</sub>S

Molecular Weight: 327.48

Structural Formula:



Chemical Name: (5RS)-2-[(EZ)-1-(ethoxyimino)butyl]-5-[(2RS)-2-(ethylthio)propyl]-3-hydroxycyclohex-2-en-1-one

Form: Powder

Color: Off-white to grey

Odor: Slight aromatic

CAS No.: 74051-80-2

### 2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Sethoxydim	74051-80-2	95
Other ingredients	---	5

### 3. Hazards Identification



---

KEEP OUT OF REACH OF CHILDREN.

Avoid contact with the skin, eyes and clothing.

Avoid inhalation of mists/vapours.

Wash thoroughly after handling.

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

General advice: First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled: Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin: Immediately wash through with plenty of water, apply sterile dressings, consult a skin specialist.

If in eyes: Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open. Consult an eye specialist.

If swallowed: Immediately rinse mouth and then drink 200-300 ml of water. Seek medical attention. Do not induce vomiting due to aspiration hazard.

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

Suitable extinguishing media: Foam, dry powder, carbon dioxide, water spray.

Special hazards arising from the substance or mixture Hazards during fire-fighting: carbon monoxide, carbon dioxide, sulfur dioxide, nitrogen oxide, nitrogen dioxide, hydrocarbons. If product is heated above decomposition temperature, toxic vapors will be released. The substances/groups of substances mentioned can be released if the product is involved in a fire.

Advice for fire-fighters: Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information: Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

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

Personal precautions: Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.



---

Environmental precautions: Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Methods and material for containment and cleaning up: Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

## **7. Handling And Storage**

Handling: Harmful if absorbed through skin or swallowed. DO NOT get in eyes, on skin, or on clothing. Wear long-sleeved shirt, long pants, chemical-resistant gloves made of any waterproof material, protective eyewear, shoes, and socks. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. DO NOT allow people or pets to come into contact with treated areas until spray has dried.

Storage: Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

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

Eye/face protection: Protective eyewear.

Skin and body protection: Long-sleeved shirt, long pants, chemical resistant gloves made of any waterproof material, shoes plus socks.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations, Respiratory protection must be provided in accordance with current local regulations.

General safety and hygiene measures: Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs.



---

## 9. Physical and Chemical Properties

Appearance: Off-white to grey powder

Water content:  $\leq 0.5\%$

Acidity (as H<sub>2</sub>SO<sub>4</sub>):  $\leq 0.3\%$

Melting point: Not applicable

Boiling point: Not applicable

Bulk density: 1.043 g/ml

Partition Coefficient:  $\log P = 1.65$  (at pH 7, 20°C)

Vapour pressure: 0.013 mPa (25°C)

Solubility: 4700 mg/l in water (20°C)

## 10. Stability and Reactivity

Reactivity: No hazardous reactions if stored and handled as prescribed/indicated.

Corrosions to metals: Corrosive effects to metal are not anticipated.

Oxidizing properties: Not an oxidizer.

Chemical stability: This product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions: This product is chemically stable. Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

Incompatible materials: Oxidizing agents.

Hazardous decomposition products: Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition: Possible thermal decomposition products: carbon monoxide, carbon dioxide, Sulfur dioxide, nitrogen dioxide, nitrogen oxides, Hydrocarbons. Stable at ambient temperature. If product is heated above decomposition temperature toxic vapors may be released.

## 11. Toxicological Information

Acute oral LD<sub>50</sub> for rats: 2676 a.i.mg/kg

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

Acute inhalation toxicity LC<sub>50</sub> (4 h) for rats: 6.28 a.i.mg/L

Skin irritation: Non-irritating to skin (rabbits)

Eye irritation: Non-irritating to eyes (rabbits)



---

Skin sensitization: Not a skin sensitiser (guinea pigs).

## **12. Ecological And Ecotoxicological Information**

Effect on birds: Acute oral LD50 for Japanese quail is >5000 a.i.mg/kg.

Effect on fish: Acute LC50 (96 h) for Rainbow trout is >170 a.i.mg/l.

Effects on aquatic invertebrates: Acute EC50 (48 h) for Daphnia magna is >1.5 a.i.mg/l.

Effects on algae: Acute 72 hour EC50 is 0.64 a.i.mg/l.

Effects on bees: contact acute 48 hour LD50 is >10 a.i.µg/bee.

Effects on earthworms: Acute 14 day LC50 is >542 a.i.mg/kg.

## **13. Disposal Considerations**

Disposal of wastes: Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the hazardous Waste representative.

Container disposal: Nonrefillable Container. DO NOT reuse or refill this container. If empty: Place in trash or offer for recycling, if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

## **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



## ZHEJIANG RAYFULL CHEMICALS CO., LTD

Tel: +86-577-88905587,88908857

Fax: +86-577-88905567

EMAIL: [info@rayfull.com](mailto:info@rayfull.com) [sales@rayfull.com](mailto:sales@rayfull.com)

---

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.