



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

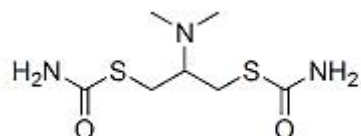
1. Chemical Product Identification

Product Name: Cartap 98% TC

Molecular Formula: C₇H₁₅N₃O₂S₂

Molecular Weight: 273.80 g/mol

Structural Formula:



Chemical Name: S,S'-(2-dimethylaminotrimethylene) bis(thiocarbamate)

Form: powder

Color: white

Odor: with a slight odour

CAS No.: 15263-53-3

2. Composition / Information On Ingredients

| Composition | CAS No. | Content % |
|-------------------|------------|-----------|
| Cartap | 15263-53-3 | 98.0 |
| Other ingredients | | 2.0 |

3. Hazards Identification



Symptoms of Acute Exposure: An extremely severe irritant to eyes. May cause severe skin irritation and contact dermatitis.

Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases.

Unusual Fire, Explosion and Reactivity Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4. First Aid Measures

Skin: Remove contaminated clothes. Rinse and then wash skin with plenty of water immediately.

Eyes: Rinse with plenty of water for several minutes (remove contact lenses if easily possible) immediately.

Ingestion: If swallowed induce vomiting by tickling the back of throat. Be quiet and call a physician.

Notes to physician: No specific antidote if ingested. Treat symptomatically.

5. Fire-Fighting Measures

Extinguishing media

To be used: Powder, water spray, foam, carbon dioxide.

Don't use: Not applicable

Particular risk: None

Measures of personal protection: Safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants.

Environmental cautions

EX: Prevent the contamination of the floor and the beds of water.

6. Accidental Release Measures

Personal cautions: Safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants.

Cleaning methods

EX: The empty container may be decontaminated by rinsing two or three times with water and detergent and scrubbing the sides.

Environmental cautions



EX: Prevent the contamination of the floor and the beds of water.

7. Handling And Storage

Handling: Handle the pesticide with gloves and wash the hand after 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.

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

Form: powder

Color: white

Odor: with a slight odour

Melting point: 179-181°C

Density: 1.17 g/cm³

pH: 3.0-6.0

Moisture: ≤1%

10. Stability And Reactivity

Stability: stable at normal condition.

Incompatibility: Incompatible with alkali.

Hazardous reaction: The substance decomposes on heating and on burning producing toxic and corrosive fumes including hydrogen chloride and nitrogen oxides.

11. Toxicological Information

Acute oral LD₅₀ for rat: 325 a.i.mg/kg.

Acute dermal LD₅₀ for rat: >1000 a.i.mg/kg.



Inhalation LC₅₀ (4 h) for rat: >0.54 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 fish: Acute LC₅₀ (96 h) for Carp is 1.6 a.i.mg/l.

Effects on aquatic invertebrates: Acute EC₅₀ (48 h) for Daphnia magna is 0.01 a.i.mg/l.

Effects on bees: acute (48 h) LD₅₀ is 10 a.i.µg/bee.

13. Disposal Considerations

Disposal must be in accordance with applicable local regulations. Remove nonusable solid materials and/or contaminated soil for disposal in an approved and permitted landfill. Do not flush into surface water or sanitary sewer systems.

Spillage disposal: Do not wash away into sewer. Do not let this chemical enter the environment. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.

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



ZHEJIANG RAYFULL CHEMICALS CO., LTD

Tel: +86-577-88905587,88908857

Fax: +86-577-88905567

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

sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.