



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

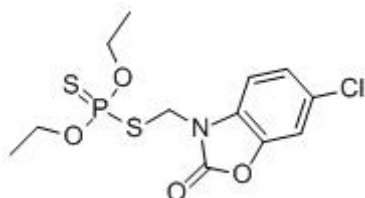
1. Chemical Product Identification

Product Name: Phosalone 95% TC

Molecular Formula: C₁₂H₁₅ClNO₄PS₂

Molecular Weight: 367.8 g/mol

Structural Formula:



Chemical Name: S-6-chloro-2,3-dihydro-2-oxo-1,3-benzoxazol-3-ylmethyl O,O-diethyl phosphorodithioate

Form: Crystal

Color: Light pink to white

Odor: With a garlic-like odor

CAS No.: 2310-17-0

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Phosalone	2310-17-0	95.0
Other ingredients		5.0



3. Hazards Identification

Component	Symbol	R phrases
Phosalone	T;N	R21-25-50/53

More important danger for the man: The substance irritates the eyes, the skin and the respiratory tract. Weak cholinesterase inhibitor. Medical observation is indicated.

Dangers for the environment: The substance is very toxic to aquatic organisms. Avoid release to the environment in circumstances different to normal use.

Physical-chemical dangers: The substance decomposes on heating producing toxic fumes of hydrogen chloride, nitrogen oxides, phosphorous oxides and sulfur oxides.

4. First Aid Measures

Skin: Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.

Eyes: First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

Inhalation: Move affect person to fresh air and keep at rest until recovered. If not breathing, give artificial respiration and get to a doctor.

Ingestion: Do not induce vomiting if the person is conscious. Give glass of water. Get to a doctor.

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

5. Fire-Fighting Measures

Extinguishing media

To be used: Water spray, powder.

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 beds of water.

7. Handling And Storage

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. Do not contaminate other stored products or the storage area by handling or storage of this product. Keep in a well-ventilated room.

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: crystal

Color: Light pink to white

Odor: with a garlic-like odor

Melting point: 45-48°C

Boiling point: Decomposes before boiling

Flash point: Not expected to self ignite; Not highly flammable

Density: 1.39 g/ml at 20°C

Vapour pressure: 1.56×10^{-2} m pa at 25°C

Moisture content: $\leq 1.0\%$

pH: 7.0-9.0



10. Stability And Reactivity

Conditions to avoid: fire and flame, high temperature;

Products to avoid: none.

Thermal decomposition: none.

Hazardous decomposition products: hydrogen chloride, nitrogen oxides, phosphorous oxides and sulfur oxides.

Hazardous reaction: The substance decomposes on heating producing toxic fumes of hydrogen chloride, nitrogen oxides, phosphorous oxides and sulfur oxides.

11. Toxicological Information

Acute oral LD₅₀ for rats is 120 a.i.mg/kg.

Acute percutaneous LD₅₀ for rats is 1530 a.i.mg/kg.

Acute inhalation toxicity LC₅₀ for rats is 1.26 a.i.mg/l.

Skin irritation: Non-irritating to skin (rabbits).

Eye irritation: Slightly irritating to eyes (rabbits).

Skin sensitization for guinea pig: Not a skin sensitiser.

12. Ecological And Ecotoxicological Information

Effect on birds: Acute oral LD₅₀ for mallards is >2150 mg/kg, for pheasants is 290 mg/kg.

Effect on fish: Acute LC₅₀ (96 h) for Rainbow trout is 0.63 mg/l.

Effects on aquatic invertebrates: Acute EC₅₀ (48 h) for Daphnia magna is 0.00074 mg/l.

Effects on algae: Acute EC₅₀ (72 h) for Scenedemus subspicatus is 1.1 mg/l.

Effects on bees: Contact acute (48 h) LD₅₀ is 4.4 µg/bee, Oral acute (48 h) LD₅₀ is 102 µg/bee.

Effects on earthworms: Acute 14 day LC₅₀ is 22.5 mg/kg.

13. Disposal Considerations

Material which can not be used at the site should be disposed of in an approved waste disposal facility following all applicable Local regulations. If burned, stay out of smoke. Do not contaminate water supplies by disposal of wastes or containers.

Spillage disposal: Do not wash away into sewer. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then



ZHEJIANG RAYFULL CHEMICALS CO., LTD

Tel: +86-577-88905587,88908857

Fax: +86-577-88905567

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

remove to safe place (extra personal protection: complete protective clothing including self-contained breathing apparatus).

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.