



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

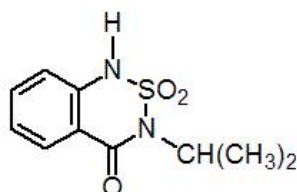
1. Chemical Product Identification

Common Name: Bentazone 95% TC

Molecular Formula: C₁₀H₁₂N₂O₃S

Molecular Weight: 240.3

Structural Formula:



Chemical Name: 3-isopropyl-1*H*-2,1,3-benzothiadiazin-4(3*H*)-one 2,2-dioxide

Form: Powder

Colour: Yellow to off-white

CAS No.: 25057-89-0

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Bentazone	25057-89-0	95
Other ingredients	---	5

3. Hazards Identification

Harmful if swallowed.

Toxic to aquatic life with long lasting effects.

Very toxic to aquatic life.



4. First Aid Measures

Inhalation: Remove victim from area of exposure - avoid becoming a casualty. Seek immediate medical advice.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eye Contact: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion: Rinse mouth with water. If swallowed, do not induce vomiting. Give a glass of water. Seek immediate medical assistance.

Notes to physician: Treat symptomatically.

5. Fire-Fighting Measures

Specific Hazards: Non-combustible material.

Fire-fighting advice: Not combustible, however following evaporation of the water component of the material, the residual material can burn if ignited. On burning will emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

Suitable Extinguishing Media: Not combustible, however, if material is involved in a fire use: Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

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

Methods and material for containment and cleaning up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.



Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

Reference to other sections: Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling And Storage

Handling advice: Keep out of reach of children. Avoid skin and eye contact and breathing in vapor, mists and aerosols.

Storage advice: Store in the original container, tightly closed and away from foodstuffs. Keep containers closed when not in use - check regularly for leaks.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits: No value assigned for this specific material .

Engineering Control Measures: Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

Personal Protective Equipment: Avoid contact with eyes and skin and breathing in spray mist. Wear gloves and eye protection when mixing or using. Use with adequate ventilation. Wash hands and exposed skin thoroughly after use.

9. Physical and Chemical Properties

Appearance: Yellow to off-white powder

pH: 6.0-9.0

Moisture: $\leq 0.5\%$

Melting point: 139°C

Boiling point: Decomposes before boiling

Bulk density: 1.41 g/ml

Partition Coefficient: $\log P = -0.46$ (at pH 7, 20°C)

Vapour pressure: 0.17 mPa (25°C)

Solubility: 7.112 g/l in water (20°C); In organic solvents: 0.018 g/l in n-heptane, 21 g/l in toluene, 388 g/l in ethyl acetate, 556 g/l in methanol (all at 20°C).

10. Stability and Reactivity



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

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

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

Conditions to avoid: See MSDS section 7 - Handling and storage.

Substances to avoid: strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute oral LD50 for rat: 1400 a.i.mg/kg.

Acute dermal LD50 for rat: >5000 a.i.mg/kg.

Inhalation LC50 (4 h) for rat: >5.1 a.i. mg/L.

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

Eye irritation: Moderately-irritating to eyes (rabbits).

Skin sensitization: Sensitization after skin contact possible.

12. Ecological And Ecotoxicological Information

Effect on birds: moderate toxicity to birds, acute oral LD50 for Bobwhites quail is 1140 a.i.mg/kg.

Effect on fish: low toxicity to fish, acute 96 hour LC50 for Rainbow trout is >100 a.i.mg/L.

Effect on aquatic invertebrates: low toxicity to aquatic invertebrates, acute 48 hour EC50 for Daphnia magna is >100 a.i.mg/L.

Effect on algae: low toxicity to algae, acute 120 hour EC50 for Anabaena flos-aquae is 10.1 a.i.mg/L.

Effect on honeybees: low toxicity to honeybees, contact acute 48 hour LD50 is >200 a.i.µg/bee; oral acute 48 hour LD50 is >200 a.i.µg/bee.

Effect on earthworms: moderate toxicity to earthworms, acute 14 day LC50 for Eisenia foetida is 870 a.i.mg/kg.

13. Disposal Considerations

Waste treatment methods: Must be sent to a suitable incineration plant, observing local regulations.



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Contaminated packaging: Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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.