

Bentazone -MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

ZHEJIANG RAYFULL CHEMICALS CO.,LTD

ADD: NO.113 PUXING 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

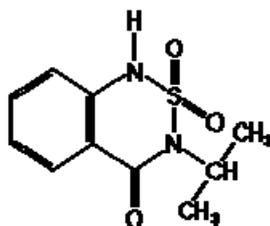
1. Chemical Product Identification

Product Name: Bentazone

Molecular Formula: C₁₀H₁₂N₂O₃S

Molecular Weight: 240.3

Structural Formula:



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

Form: Liquid

Color: Yellow - Brown

Odor: N/A

CAS No.: 25057-89-0

2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Bentazone	25057-89-0	95.0
Other ingredients		5.0

3. Hazards Identification

Classification: Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

Subclasses: Subclass 6.3 Category B - Substances that are mildly irritating to the skin.

Subclass 6.4 Category A - Substances that are irritating to the eye.

Subclass 6.5 Category B - Substances that are contact sensitizers.

Subclass 9.1 Category D - Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action.

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

Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services.

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 by the New Zealand Occupational Safety and Health Service.

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

Water Solubility: 500 mg/L @ 20°C

Solubility in Other Solvents: acetone v.s.; ethanols, ethyl acetates, and benzene s.s.; cyclohexane s.s.

Melting Point: 137-139°C

Vpor Pressure: Negligible; <0.46 mPa @ 20°C

Partition Coefficient: 0.4559

Adsorption Coefficient: 34 (parent acid)

10. Stability and Reactivity

Stability: Stable under normal conditions of use.

11. Toxicological Information

Acute Oral LD50 (rat): >1000 mg/kg

Acute Dermal LD50 (rat): >2500 mg/kg

SKIN: Moderate irritant (rabbit).

EYES: Moderate irritant (rabbit).

Reproductive effects: No data are currently available.

Teratogenic effects: Birth defects were observed in one rat study at a dose of 200 mg/kg/day, but the validity of these data are in question. No further data are currently available.

Mutagenic effects: No data are currently available.

Carcinogenic effects: Tumors have been seen in rats given 200 mg/kg/day of bentazon, but these results are questionable. No further data are currently available.

Organ toxicity: Animal studies have shown that the prostate gland may be affected.

12. Ecological And Ecotoxicological Information

Effects on birds: Technical and formulated bentazon are both slightly toxic to birds. The oral LD50 of formulated bentazon (BAS 3510H) is 2000 mg/kg in mallard ducks and 720 mg/kg in Japanese quail.

Effects on aquatic organisms: Bentazon is practically nontoxic to both coldwater and warmwater fish. Bentazon is slightly toxic to aquatic invertebrates. The LC50 (96-hour) for bentazon in rainbow trout is 510 mg/L for wettable powder. The LC50 (96-hour) for technical bentazon is 616 mg/L in bluegill sunfish, and in rainbow trout it is 190 mg/L. For formulated bentazon (BAS 35- H), the LC50 (96-hour) in bluegills is 1060 mg/L, and in rainbow trout is 636 mg/L. The bioconcentration factor for bentazon predicted from its water solubility is 19, indicating low bioaccumulation potential.

Effects on other organisms: Applications of bentazon are not considered hazardous to most non-target organisms because of its generally low toxicity. Bentazon is not toxic to bees.

13. Disposal Considerations

Refer to local government authority for disposal recommendations. Rinse empty container, puncture and recycle or dispose of safely with domestic rubbish.

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.