

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Bromadiolone 0.005% RB
Substance: Suspension concentrate of Bromadiolone
Chemical name of active ingredient: IUPAC Name:
3-[3-(4'-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxycoumarin
CA Name:
3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2H-1-benzopyran-2-one
Product Use: Rodenticide
Manufacturer: Spinochem Tech Co.,Ltd
Address: No.2278,Zhaochong Rd,Shanghai,China
Emergency telephone No.: + 86 21 64238765

2. HAZARDS IDENTIFICATION

According to Regulation (EC) No1272/2008

Acute toxicity: Category 4

Eye irritation: Category 2

Specific target organ toxicity - repeated exposure: Category 1

Reproductive toxicity: Category 1B

Label elements

Bromadiolone



Signal word: Danger

Hazard statements

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

H360D May damage the unborn child.

Restricted to professional users.

Precautionary statements

P201 Obtain special instructions before use.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.

P501 Dispose of contents/container in accordance with local regulation.

Other hazards

No other hazards known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Classification REGULATION (EC) No 1272/2008	Content
Bromadiolone	28772-56-7	Acute Tox. 1, H300 Acute Tox. 1, H330 STOT RE 1, H372 Aquatic Acute 1, H400 Repr. 1B, H360D Aquatic Chronic 1, H410 Acute Tox. 1, H310	0.005%
Others	Not applicable	/	Up to 100%

4. FIRST AID MEASURES

General advice

Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely. Symptoms of poisoning may appear several hours later.

Inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products. Oxygen or artificial respiration if needed. Call a physician or poison control center immediately.

Skin contact

Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. Call a physician or poison control center immediately.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth.

Symptoms

If large amounts are ingested, the following symptoms may occur:

Hematoma, Nose bleeding, Bruising and haemorrhage formation, Bloody vomiting
Symptoms and hazards refer to effects observed after intake of significant amounts of the active ingredient(s).

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon Dioxide.

Special hazards arising from the substance or mixture

In the event of fire the following may be released, Carbon monoxide (CO), Bromine.

Advice for firefighters

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus. Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

Environmental precautions

Do not allow to get into surface water, drains and ground water.

Method and material for containment and cleaning up

Use mechanical handling equipment. Clean contaminated floors and objects thoroughly, observing environmental regulations. Collect and transfer the product into a properly labelled and tightly closed container.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

Store in original container. Store in a place accessible by authorized persons only.

Keep away from direct sunlight. Protect from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No known occupational limit values.

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

Respiratory protection in case of insufficient exhaust ventilation or prolonged exposure:

Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent.

Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Eye protection

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection

Wear standard coveralls and Category 3 Type 4 suit.

If there is a risk of significant exposure, consider a higher protective type suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: solid, red

Colour: red

Odour: sweet, cereals-like

Odour: Threshold No data available

pH: No data available

Melting point/range: 56 °C

Boiling Point: No data available

Flash point: No data available

Flammability: No data available

Auto-ignition temperature: No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available.

Conditions to avoid

High temperature, direct sunlight, etc.

Incompatible materials

Store only in the original container., Strong oxidizing agents, Bases.

Hazardous decomposition products

Other decomposition products - No data available.

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

There is no data available for the formulation type, so the technical information is listed for the reference.

Oral Acute oral LD50 for rats 1.31, mice 1.75, rabbits 1.00, dogs >10.0, cats >25.0 mg/kg.

Skin and eye Acute percutaneous LD50 for rabbits 1.71, rats 23.31 mg/kg.

Inhalation LC50 for rats <0.02 mg/l.

12. ECOLOGICAL INFORMATION

Birds Acute oral LD50 for Japanese quail 134 mg/kg b.w.

Fish LC50 (96 h) for rainbow trout 2.89 mg/l; NOEC (96 h) 1.78 mg/l.

Daphnia EC50 (48 h) 5.79 mg/l; NOEC (48 h) 1.25 mg/l.

Algae ErC50 (72 h) 1.14 mg/l; EyC50 (72 h) 0.66 mg/l.

Bees Not hazardous to bees when used as directed.

Worms LC50 for earthworms >1054 mg/kg dry weight.

Persistence and degradability

Not rapidly biodegradable

Bioaccumulative potential

Bromadiolone: Bioconcentration factor (BCF) 339 - 575

Potential bioaccumulation

Mobility in soil

Immobile in soil.

Result of PBT and vPvB assessment

Bromadiolone: This substance is considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative(vPvB).

Other adverse effects

No other effects to be mentioned.

13. DISPOSAL CONSIDERATIONS

Product In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

Contaminated packaging Not completely emptied packagings should be disposed of as hazardous waste.

14. TRANSPORT INFORMATION

UN number

ADR/RID: 3027

IMDG: 3027

IATA: 3027

UN proper shipping name

ADR/RID: COUMARIN DERIVATIVE PESTICIDE, SOLID, TOXIC
(BROMADIOLONE MIXTURE)

IMDG: COUMARIN DERIVATIVE PESTICIDE, SOLID, TOXIC
(BROMADIOLONE MIXTURE)

IATA: COUMARIN DERIVATIVE PESTICIDE, SOLID, TOXIC
(BROMADIOLONE MIXTURE)

Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

Packaging group

ADR/RID:I

IMDG: I

IATA: I

Environmental hazards

ADR/RID: no

IMDG Marine pollutant: yes

Special precautions for user

No data available.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

H330 Fatal if inhaled.

H360D May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effect.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.

=====