

Brodifacoum -MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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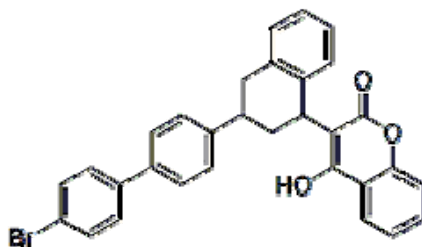
1. Chemical Product Identification

Product Name: Brodifacoum

Molecular Formula: C₃₁H₂₃BrO₃

Molecular Weight: 523.40

Structural Formula:



Chemical Name: 3-[3- (4'-bromo [1,1'- biphenyl] -4-yl)-1,2,3,4- tetrahydro-1-naphthalenyl]-4-hydroxy-2H-1-benzopyran-2-one

Form: Powder

Color: White

Odor: Not applicable

CAS No.: 56073-10-0

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Brodifacoum	56073-10-0	950
Other ingredients		5.0

3. Hazards Identification

Ingestion: Spontaneous vomiting may occur after ingestion. Gastrointestinal bleeding and retroperitoneal hematoma may develop in patients with coagulopathy.

Inhalation: Hemoptysis, hemothorax and diffuse alveolar hemorrhage have been reported in patients with severe coagulopathy.

Skin: Ecchymoses and hematomas are common in patients with significant coagulopathy.

4. First Aid Measures

Skin: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Eyes: If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Ingestion: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation: If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

5. Fire-Fighting Measures

Fire Fighting: Fire Fighting: Wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use agent most appropriate to extinguish fire.

6. Accidental Release Measures

Small spills/leaks: Evacuate area and ventilate. Wear protective equipment. If required, use an inert absorbent. Sweep up and place in an appropriate container for disposal. Wash contaminated surfaces.

7. Handling and Storage

Storage: Keep in a cool, dry, dark location in a tightly sealed container or cylinder. Keep away from incompatible materials, ignition sources and untrained individuals. Secure and label area. Protect containers/cylinders from physical damage.

Handling: All chemicals should be considered hazardous. Avoid direct physical contact. Use appropriate, approved safety equipment. Untrained individuals should not handle this chemical or its container. Handling should occur in a chemical fume hood.

8. Exposure Controls/Personal Protection

Personal Protection: Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Wear chemical resistant gloves. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respirators: Use NIOSH/ MSHA approved respirator appropriate for exposure of concern.

Poison Class: 1

9. Physical and Chemical Properties

Appearance: White to off-white crystalline powder

Melting Point: 228-230°C

Vapor Pressure: 2.13mPa at 25°C

Partition coefficient: Log P_{OW}=8.5

Solubility: In water at 20°C 0.0038mg/l; In organic solvents at 20°C: 6g/l in Ethyl acetate, 6 g/l in Benzene, 30 g/l in Chloroform, 6g/l in Acetone

Solubility in water: Insoluble

10. Stability and Reactivity

Stability Stable under normal conditions.

Hazardous Decomposition Products: Not expected to be formed during normal storage

Incompatible materials: Strong oxidizing agents.

11. Toxicological Information

Acute oral LD₅₀ for rat: 0.26 mg/kg

Acute oral LD₅₀ for guinea pig: 2.78 mg/kg

Acute oral LD₅₀ for cat: 25.0 mg/kg

Acute oral LD₅₀ for dog: 3.56 mg/kg

Acute oral LD₅₀ for pig: 0.5-2.0 mg/kg

Acute oral LD₅₀ for sheep: 5-25 mg/kg

Acute dermal LD₅₀ (24h) for rat: 10-50mg/kg

Skin: Slight irritation to the skin

EYE: Moderate irritant to the eyes

12. Ecological and Ecotoxicological Information

LC₅₀ for rainbow trout (24h): 0.155 mg/l

LC₅₀ for rainbow trout (48h): 0.09 mg/l

LC₅₀ for rainbow trout (96h): 0.05 mg/l

LC₅₀ for Blue gill (24h): 0.39 mg/l

LC₅₀ for Blue gill (48h): 0.225 mg/l

LC₅₀ for Blue gill (96h): 0.165 mg/l

LD₅₀ for mallard: 2.0 mg/kg

LC₅₀ for mallard: 2.7 mg/kg

LC₅₀ for bobwhite: 0.8 mg/kg

13. Disposal Considerations

Disposal of waste: product and containers must be burned or buried. All rodent bodies must also be burned or buried. Do not place in refuse bins or on rubbish tips.

Disposal of containers: Empty container completely and dispose of safely. Burn or bury in accordance with local authority regulations.

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.