Brodifacoum: sc-239414



MATERIAL SAFETY DATA SHEET

The Power to Question

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Brodifacoum **Product Number:** sc-239414

Supplier: Santa Cruz Biotechnology, Inc.

2145 Delaware Avenue Santa Cruz, CA 95060

800.457.3801 or 831.457.3800

Emergency: ChemWatch

Within the US & Canada: 877-715-9305

Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Target Organ Effect, Highly toxic by inhalation, Highly toxic by ingestion, Highly toxic by skin absorption

Target Organs

Blood

GHS Classification

Acute toxicity, Dermal (Category 1) Acute toxicity, Oral (Category 1) Eye irritation (Category 2B)

Specific target organ toxicity - repeated exposure (Category 1)

Acute aquatic toxicity (Category 1)

GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H300 + H310 Fatal if swallowed or in contact with skin

H320 Causes eye irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

Precautionary statement(s)

P264 Wash hands thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

HMIS Classification

Health hazard: 4
Chronic Health Hazard: *
Flammability: 0
Physical hazards: 0

NFPA Rating

Health hazard: 4
Fire: 0
Reactivity Hazard: 0

Potential Health Effects

Inhalation May be fatal if inhaled. May cause respiratory tract irritation.Skin May be fatal if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation. **Ingestion** May be fatal if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C31H23BrO3 Molecular Weight: 523.42

CAS-No. EC-No. Index-No. Concentration

Brodifacoum

56073-10-0 259-980-5 607-172-00-1

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

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

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions: Carbon oxides, Hydrogen bromide gas

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

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

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	solid	рН	no data available
Boiling point	no data available	Flash point	no data available
Ignition temperature	no data available	Lower explosion limit	no data available
Vapor pressure	no data available	Upper explosion limit	no data available
Density	no data available	Water solubility	no data available
Relative vapor density	no data available	Odor	no data available
Odor Threshold	no data available	Evaporation rate	no data available
Auto-ignition temperature	no data available	Partition coefficient	no data available
Melting point	no data available	n-octanol/water	
Freezing point	no data available		

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: Carbon oxides, Hydrogen bromide gas

Other decomposition products

no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50 LD50 Oral - rat - 0.16 mg/kg

Inhalation LC50 LC50 Inhalation - rat - 4 h - 0.5 mg/m3

Dermal LD50 no data available

Other information on acute toxicity no data available

Skin corrosion/irritation

Skin - rabbit -

Serious eye damage/eye irritation

Eyes - rabbit - Mild eye irritation

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as a ACGIH:

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1% is identified as a OSHA:

carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

no data available

Potential health effects

May be fatal if inhaled. May cause respiratory tract irritation. Inhalation

Ingestion May be fatal if swallowed.

May be fatal if absorbed through skin. May cause skin irritation. Skin

Eves May cause eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

no data available

Additional Information

RTECS: GN4934750

12. ECOLOGICAL INFORMATION

Toxicity Persistence and degradability

Toxicity to fish LC50 - Oncorhynchus mykiss

(rainbow trout) - 0.02 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 0.98 mg/l - 48 h Other adverse effects

Bioaccumulative potential

no data available

PBT and vPvB assessment

no data available

no data available

Mobility in soil

no data available

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to

aquatic life.

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 2811 Class: 6.1 Packing group: I

Proper shipping name: Toxic solids, organic, n.o.s. (Brodifacoum)

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Brodifacoum)

Marine pollutant: Marine pollutant

IATA

UN number: 2811 Class: 6.1 Packing group: I

Proper shipping name: Toxic solid, organic, n.o.s. (Brodifacoum)

IATA Passenger: Not permitted for transport

15. REGULATORY INFORMATION

OSHA Hazards

Target Organ Effect, Highly toxic by inhalation, Highly toxic by ingestion, Highly toxic by skin absorption

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Brodifacoum CAS-No. 56073-10-0

Pennsylvania Right To Know Components

Brodifacoum CAS-No. 56073-10-0

New Jersey Right To Know Components

Brodifacoum CAS-No. 56073-10-0

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

02/20/2014