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JIANGSU INTER CHINA-GROUP CORPORATION Addr: NO. 116 Dingmaoqiao Road, ZhenJiang, Jiangsu, China Tel: 0086 511 84416352 Fax: 0086 511 84441036 Email: tom@deanpestcontrol.com

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Brodifacoum Product Number : 46036 Brand : Deanpestcontrol

Product Use: For laboratory research purposes.

Supplier :Dean Pest Control Group Ltd. Co.

Co.5FLOOR,INTER-CHINA BUILDING, NO.116DINGMAOQIAOROAD,ZHENJIANG,

JIANGSU, REPUBLIC OF CHINA

Telephone: 86-511-84416352

Fax: 86-511-84441036

Emergency Phone # (For: 86-511-84416352

both supplier and manufacturer)

Preparation Information: Dean Pest Control Group Ltd. Co.

Manufacturer: Dean Pest Control Group Ltd.

Co.5FLOOR,INTER-CHINA BUILDING, NO.116DINGMAOQIAOROAD,ZHENJIANG,

JIANGSU, REPUBLIC OF CHINA

2. HAZARDS IDENTIFICATION

Emergency Overview

Target Organs

Blood

WHMIS Classification

D1A Very Toxic Material Causing Immediate and

Serious Toxic Effects

Highly toxic by ingestion
Highly toxic by skin absorption
Highly toxic by inhalation

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.

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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
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 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Brodifacoum			
56073-10-0	259-980-5	607-172-00-1	<=100%

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.

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

Explosion data - sensitivity to mechanical impact

no data available

Explosion data - sensitivity to static discharge

no data available

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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.

Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form solid

Colour no data available

Safety data

pH no data available

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no data available Melting

point/freezing point

Boiling point no data available Flash point no data available no data available Ignition temperature Auto-ignition no data available

temperature

no data available Lower explosion limit no data available Upper explosion limit Vapour pressure no data available Density no data available Water solubility no data available Partition coefficient: no data available

n-octanol/water

Relative vapour no data available

density

Odour no data available Odour Threshold no data available Evapouration rate 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 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

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

Dermal LD50

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 sensitisation

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.

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

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

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

Ingestion May be fatal if swallowed.

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

Eyes 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

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RTECS: GN4934750

12. ECOLOGICAL INFORMATION

Toxicity

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

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

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

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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

WHMIS Classification

D1A Very Toxic Material Causing Immediate and

Serious Toxic Effects

Highly toxic by ingestion

Highly toxic by skin absorption

Highly toxic by inhalation

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

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.