SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-T-18288
Product Name	Difenacoum
CAS No.	56073-07-5
Category	Pesticide Standards
Synonyms	3-(3-([1,1'-Biphenyl]-4-yl)-1,2,3,4-tetrahydronaphthalen-1-yl)-4-hydroxy-2H-chromen-2-one
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Not available

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H300	Not available
H310	Not available
H330	Not available

H372	Not available
H400	Not available
H410	Not available
H300+H310+H330	Not available

Precautionary Statement(s)

Code	Statement
P203	Not available
P260	Not available
P262	Not available
P264	Wash hands thoroughly after handling.
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Not available
P301+P316	Not available
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P316	Not available
P318	Not available
P319	Get medical help if you feel unwell.
P320	Not available
P321	Specific treatment (see … on this label).
P330	Not available
P361+P364	Not available
P391	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Difenacoum
CAS Number : 56073-07-5
Molecular Formula : C31H24O3
Molecular Weight : 444.5
Parent Chemical : Difenacoum
Synonyms : 3-(3-([1,1'-Biphenyl]-4-yl)-1,2,3,4-tetrahydronaphthalen-1-yl)-4-hydroxy-2H-chromen-2-one
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
General advice:
- Seek medical attention if symptoms occur or persist.
- Show this Safety Data Sheet to the physician in attendance.
- Do not leave affected person unattended.

Inhalation:
- Move person to fresh air.
- If breathing is difficult, seek medical attention.

Skin contact:
- Remove contaminated clothing and shoes.
- Wash skin with soap and water.
- Seek medical attention if irritation or symptoms occur.

Eye contact:
- Rinse cautiously with water for several minutes.
- Remove contact lenses if present and easy to do; continue rinsing.
- Seek medical attention if irritation persists.

Ingestion:
- Rinse mouth.
- Do NOT induce vomiting unless directed by medical personnel.
- Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed
- Not available.

4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.
- Not available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media:
- Water spray, alcohol-resistant foam, dry chemical, carbon dioxide (CO2).
Unsuitable extinguishing media:
- Not available.

5.2 Special hazards arising from the substance or mixture
- Combustion may produce carbon oxides and other hazardous decomposition products.
- Specific hazardous combustion products: Not available.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Use water spray to cool unopened containers.
- Avoid inhalation of combustion products.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Avoid breathing dust.
- Avoid contact with skin and eyes.
- Use appropriate personal protective equipment (see Section 8).
- Ensure adequate ventilation.

6.2 Environmental precautions
- Prevent further leakage or spillage if safe to do so.
- Avoid release to the environment.
- Prevent entry into drains, surface waters, or soil.

6.3 Methods and material for containment and cleaning up
- Avoid generating dust.
- Collect spillage using inert absorbent material.
- Place in a suitable, closed container for disposal.
- Clean contaminated area with water and detergent where appropriate.

6.4 Reference to other sections
- See Section 8 for personal protective equipment.
- See Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Use with adequate ventilation.
- Avoid formation of dust.
- Avoid contact with skin, eyes, and clothing.
- Do not breathe dust.
- Wash hands thoroughly after handling.

- Keep away from food, drink, and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities
- Store in original container tightly closed.
- Store in a cool, dry, well-ventilated place.
- Protect from moisture.
- Keep away from incompatible materials.
Incompatible materials:
- Not available.

7.3 Specific end use(s)
- Pesticide standard / laboratory use. Not for food, drug, or household use.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limits:
- Not available.
Biological limit values:
- Not available.

8.2 Exposure controls
Engineering controls:
- Use local exhaust ventilation or general ventilation to minimize exposure.

Personal protective equipment (PPE):
Eye/face protection:
- Safety glasses with side shields or chemical splash goggles.
Skin protection:
- Wear protective gloves. Specific glove material: Not available.
- Wear protective clothing to prevent skin contact.
Respiratory protection:
- If ventilation is inadequate or dust is generated, use a suitable particulate respirator. Specific selection: Not available.
Hygiene measures:
- Wash hands after handling.
- Remove contaminated clothing and wash before reuse.
Environmental exposure controls:
- Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available

Test	Result
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity

10.1 Reactivity
- Not available.

10.2 Chemical stability
- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
- Not available.

10.4 Conditions to avoid
- Heat, open flames, and sources of ignition.
- Dust formation.
- Moisture (if applicable): Not available.

10.5 Incompatible materials
- Not available.

10.6 Hazardous decomposition products
- Carbon oxides.
- Other decomposition products: Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: LC50 (rat) => 3.64 mg/m3 LD50: 0.8 mg/kg (Oral, Mouse) (T80) LD50: 50 mg/kg (Dermal, Rat) (T80)
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: /LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ Male pigs (5/group) were fed difenacoum in the diet for 14 days at dose levels of 0.01, 0.05, 0.1, 0.5 and 1.0 mg/kg diet. With the exception of the lowest-dose group, all groups showed a marked incr of prothrombin time values. Extensive subcutaneous, inter- and intra-muscular hemorrhage and edema was observed in animals dosed at levels of 0.5 mg/kg or more. /LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ The response of Meriones shawi to seven rodenticides was investigated in laboratory feeding tests. The species proved to be much less susceptible to anticoagulants than most other species of rodent pests. Brodifacoum (at 0.005%), although giving complete mortality after only 8 days' continuous feeding, was more toxic than warfarin (0.025%), coumatetralyl (0.0375%), difenacoum (0.005%) and bromadiolone (0.005%). Calciferol (0.1%), though toxic, was significantly unpalatable. Zinc phosphide (5.0%) presented for 2 days in a choice test against unpoisoned food gave 80% mortality and appears to be the most suitable of these compounds for the control of M. shawi in the field.
- Aspiration hazard: No data available.

Likely routes of exposure
- /SIGNS AND SYMPTOMS/ ... Substantial ingestion produces epistaxis, gingival bleeding, widespread bruising, hematomas, hematuria with flank pain, menorrhagia, gastrointestinal bleeding, rectal bleeding and hemorrhage into any internal organ; anemia may result. Spontaneous hemoperitoneum has been described. Severe blood loss may result in hypovolemic shock, coma and death. The first clinical signs of bleeding may be delayed and patients may remain anticoagulated for several days (warfarin) or days, weeks or months (long-acting anticoagulants) after ingestion of large amounts...

Symptoms related to the physical, chemical and toxicological characteristics
- /SIGNS AND SYMPTOMS/ ... Substantial ingestion produces epistaxis, gingival bleeding, widespread bruising, hematomas, hematuria with flank pain, menorrhagia, gastrointestinal bleeding, rectal bleeding and hemorrhage into

any internal organ; anemia may result. Spontaneous hemoperitoneum has been described. Severe blood loss may result in hypovolemic shock, coma and death. The first clinical signs of bleeding may be delayed and patients may remain anticoagulated for several days (warfarin) or days, weeks or months (long-acting anticoagulants) after ingestion of large amounts...

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
- No data available.

12.2 Persistence and degradability
- No data available.

12.3 Bioaccumulative potential
- No data available.

12.4 Mobility in soil
- No data available.

12.5 Results of PBT and vPvB assessment
- Not available.

12.6 Endocrine disrupting properties
- Not available.

12.7 Other adverse effects
- Not available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product:
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.
Contaminated packaging:
- Dispose of as unused product in accordance with applicable regulations.
Waste codes:
- Not available.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number
- Not available.

14.2 UN proper shipping name

- Not available.

14.3 Transport hazard class(es)
- Not available.

14.4 Packing group
- Not available.

14.5 Environmental hazards
- Not available.

14.6 Special precautions for user
- Not available.

14.7 Maritime transport in bulk according to IMO instruments
- Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Not available.

SECTION 16: Other information

SECTION 16: Other information

Product identifier:
- Product name: Difenacoum
- CAS No.: 56073-07-5
- Catalog No.: CS-T-18288
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Revision information:
- Not available.

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- The information provided is believed to be accurate based on available data; however, no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for compliance with applicable laws and regulations.

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