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

Catalogue Number	CS-T-20864
Product Name	Diphacinone
CAS No.	82-66-6
Category	Pesticide Standards
Synonyms	2-(2,2-Diphenylacetyl)-1H-indene-1,3(2H)-dione
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:

Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H300	Not available
H372	Not available
H300+H310	Not available
H310	Not available

H332	Harmful if inhaled.
H330	Not available
H371	Not available

Precautionary Statement(s)

Code	Statement
P260	Not available
P264	Wash hands thoroughly after handling.
P270	Not available
P301+P316	Not available
P319	Get medical help if you feel unwell.
P321	Specific treatment (see … on this label).
P330	Not available
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P262	Not available
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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
P317	Not available
P361+P364	Not available
P284	Not available
P308+P316	Not available
P320	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Diphacinone
CAS Number : 82-66-6
Molecular Formula : C23H16O3
Molecular Weight : 340.37
Parent Chemical : Diphacinone
Synonyms : 2-(2,2-Diphenylacetyl)-1H-indene-1,3(2H)-dione
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
- General advice: Remove contaminated clothing and shoes. Seek medical attention if symptoms occur or persist.
- Inhalation: Move person to fresh air. If breathing is difficult, get medical attention.
- Skin contact: Wash with plenty of soap and water. Get medical attention if irritation develops.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention if irritation persists.
- Ingestion: Rinse mouth. Do NOT induce vomiting unless directed by medical personnel. Get medical attention.

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

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

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
- Suitable extinguishing media: Use extinguishing measures appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture
- Hazardous combustion products: Not available.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Prevent fire-fighting water from entering drains or watercourses.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

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

6.2 Environmental precautions
- Avoid release to the environment. Prevent entry into drains, surface water, and soil.

6.3 Methods and material for containment and cleaning up
- Contain spill. Collect using non-sparking tools and place in a suitable, labeled container for disposal.
- Clean contaminated area with appropriate methods. Avoid generating dust.

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

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Handle in accordance with good industrial hygiene and safety practice.
- Avoid contact with skin, eyes, and clothing. Avoid breathing dust.
- Use with adequate ventilation. Wash hands thoroughly after handling.

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

7.3 Specific end use(s)
- Pesticide standard / laboratory use. Other specific uses: Not available.

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: Provide adequate ventilation. Use local exhaust where dust or aerosols may be generated.
- Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves and protective clothing appropriate to the task.
- Respiratory protection: Use appropriate respiratory protection if ventilation is inadequate or if airborne concentrations are unknown.
- 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
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
- Not available.

10.5 Incompatible materials
- Not available.

10.6 Hazardous decomposition products
- Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: LC50 (rat) = 2000 mg/m3/4H /SIGNS AND SYMPTOMS/ Bleeding is the major toxicity of ... /anticoagulant/.
- Skin corrosion/irritation: /LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ In a dermal sensitization study with Hartley albino male guinea pigs with diphacinone technical (96.57%), the test material was administered as a topical application at various dose concns. The test article was kept in contact with the skin surface for a 6 hr period. After the initial exposure, the test article was administered on alternate days 3 days/wk such that each animal received 10 sensitizing treatments. Following the tenth treatment, animals were rested for 2 weeks, and then given an 11th (challenge) dose. The major problem in this dermal sensitization study was on determining a non-lethal dose level. In the initial assay application of 500 mg caused death and/or severe hemorrhage from the external nares in some animals and evident discomfort in others, with the result that all surviving animals were euthanized. Further testing at doses of 5, 10, 20, 40 or 80 mg with two male guinea pigs/dose resulted in all animals either dying or being euthanized on or about the 7th day after the initial dose. Additional dosing at 0.1, 0.5, 1.0 or 2.5 mg with two animals/dose resulted in the death of one animal in the 0.5 mg group. As a result, the final dose selected was 2.5 mg in 10 guinea pigs (one of these animals died 13 days after the initial dose). Signs of dermal irritation were not observed in any of the guinea pigs at any dose level during the study, and there were no indications of any sensitization reaction in the survivors of the final assay (dose level: 2.5 mg/animal). There were 3 guinea pigs in a positive control group (each received 2.5 mg/application). One of these positive control animals died before the challenge application, but positive responses were elicited in the remaining 2 guinea pigs. The findings of this study adequately demonstrate that technical diphacinone at a non-lethal exposure level is neither a dermal irritant nor a sensitizer. /Technical diphacinone (96.57%)/
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: /LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ In a dermal sensitization study with Hartley albino male guinea pigs with diphacinone technical (96.57%), the test material was administered as a topical application at various dose concns. The test article was kept in contact with the skin surface for a 6 hr period. After the initial exposure, the test article was administered on alternate days 3 days/wk such that each animal received 10 sensitizing treatments. Following the tenth treatment, animals were rested for 2 weeks, and then given an 11th (challenge) dose. The major problem in this dermal sensitization study was on determining a non-lethal dose level. In the initial assay application of 500 mg caused death and/or severe hemorrhage from the external nares in some animals and evident discomfort in others, with the result that all surviving animals were euthanized. Further testing at doses of 5, 10, 20, 40 or 80 mg with two male guinea pigs/dose resulted in all animals either dying or being euthanized on or about the 7th day after the initial dose.

Additional dosing at 0.1, 0.5, 1.0 or 2.5 mg with two animals/dose resulted in the death of one animal in the 0.5 mg group. As a result, the final dose selected was 2.5 mg in 10 guinea pigs (one of these animals died 13 days after the initial dose). Signs of dermal irritation were not observed in any of the guinea pigs at any dose level during the study, and there were no indications of any sensitization reaction in the survivors of the final assay (dose level: 2.5 mg/animal). There were 3 guinea pigs in a positive control group (each received 2.5 mg/application). One of these positive control animals died before the challenge application, but positive responses were elicited in the remaining 2 guinea pigs. The findings of this study adequately demonstrate that technical diphacinone at a non-lethal exposure level is neither a dermal irritant nor a sensitizer. /Technical diphacinone (96.57%)/
- 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/ In a dermal sensitization study with Hartley albino male guinea pigs with diphacinone technical (96.57%), the test material was administered as a topical application at various dose concns. The test article was kept in contact with the skin surface for a 6 hr period. After the initial exposure, the test article was administered on alternate days 3 days/wk such that each animal received 10 sensitizing treatments. Following the tenth treatment, animals were rested for 2 weeks, and then given an 11th (challenge) dose. The major problem in this dermal sensitization study was on determining a non-lethal dose level. In the initial assay application of 500 mg caused death and/or severe hemorrhage from the external nares in some animals and evident discomfort in others, with the result that all surviving animals were euthanized. Further testing at doses of 5, 10, 20, 40 or 80 mg with two male guinea pigs/dose resulted in all animals either dying or being euthanized on or about the 7th day after the initial dose. Additional dosing at 0.1, 0.5, 1.0 or 2.5 mg with two animals/dose resulted in the death of one animal in the 0.5 mg group. As a result, the final dose selected was 2.5 mg in 10 guinea pigs (one of these animals died 13 days after the initial dose). Signs of dermal irritation were not observed in any of the guinea pigs at any dose level during the study, and there were no indications of any sensitization reaction in the survivors of the final assay (dose level: 2.5 mg/animal). There were 3 guinea pigs in a positive control group (each received 2.5 mg/application). One of these positive control animals died before the challenge application, but positive responses were elicited in the remaining 2 guinea pigs. The findings of this study adequately demonstrate that technical diphacinone at a non-lethal exposure level is neither a dermal irritant nor a sensitizer. /Technical diphacinone (96.57%)/ /LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ Rats were fed diets containing 0.0313-0.5 ppm diphacinone for 90 days or 0.125-4.0 ppm for 21 days. In the 90 day test, only 2 of 72 rats died, and survivors showed little change in prothrombin clotting time and blood chemistry values. The fibrinogen levels were decreased in rats fed 0.5 ppm. In 21day study, all rats fed 2 and 4 ppm died. In survivors fed lower doses, prothrombin times were not affected.
- Aspiration hazard: No data available.

Likely routes of exposure
- EASILY ABSORBED! See Inhalation.

Symptoms related to the physical, chemical and toxicological characteristics
- Coughing up blood. Blood in the urine. Bleeding under the skin. Symptoms may be delayed.

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity

- Not available.

12.2 Persistence and degradability
- Not available.

12.3 Bioaccumulative potential
- Not available.

12.4 Mobility in soil
- Not 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
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.
- Recommended disposal method: Not available.

SECTION 14: Transport information

SECTION 14: Transport information

- UN number: Not available.
- UN proper shipping name: Not available.
- Transport hazard class(es): Not available.
- Packing group: Not available.
- Environmental hazards: Not available.
- Special precautions for user: Not available.
- 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.

15.2 Chemical safety assessment
- Not available.

SECTION 16: Other information

SECTION 16: Other information

- Product name: Diphacinone
- CAS No.: 82-66-6
- Catalog No.: CS-T-20864
- Synonyms: 2-(2,2-Diphenylacetyl)-1H-indene-1,3(2H)-dione
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Disclaimer: The information provided is based on available product information and is intended for guidance in safe handling. Not all properties and hazards may be known. Users are responsible for compliance with applicable regulations and for determining suitability for their particular use.

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