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

Catalogue Number	CS-O-00872
Product Name	Anagrelide
CAS No.	68475-42-3
Category	API
Synonyms	6;7-dchloro-5;10-dihydro-3H-imidazo[2;1-b]quinazolin-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:

Skin irritation (Category 2)
Serious eye damage/eye irritation (Category 2)
Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H302	Harmful if swallowed.
H315	Causes skin irritation.

H319	Causes serious eye irritation.
H335	Not available
H360	Not available

Precautionary Statement(s)

Code	Statement
P203	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P264+P265	Not available
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317	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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if presen
P318	Not available
P319	Get medical help if you feel unwell.
P321	Specific treatment (see … on this label).
P330	Not available
P332+P317	If skin irritation occurs: Get medical help.
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
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 : Anagrelide

CAS Number : 68475-42-3
Molecular Formula : C10H7Cl2N3O
Molecular Weight : 256.1
Parent Chemical : Anagrelide
Synonyms : 6;7-dchloro-5;10-dihydro-3H-imidazo[2;1-b]quinazolin-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 SDS to the physician.
Inhalation: Move person to fresh air. If breathing is difficult, seek medical attention.
Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. 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. Seek medical attention if irritation persists.
Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Seek 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. No data 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 (e.g., water spray, alcohol-resistant foam, dry chemical, carbon dioxide).
Unsuitable extinguishing media: Not available.

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

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

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. Ensure adequate ventilation. Wear appropriate personal protective equipment.

6.2 Environmental precautions
Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not allow to enter drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up
Avoid generating dust. Collect spilled material using methods that minimize dust generation (e.g., damp wipe or HEPA-filtered vacuum). Place in a suitable, closed container for disposal. Clean contaminated area.

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 formation of dust and aerosols. Avoid contact with skin, eyes, and clothing. Do not breathe 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. Keep away from incompatible materials.
Incompatible materials: Not available.

7.3 Specific end use(s)
API / laboratory or industrial use. Not for food, drug, or household use. 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: Use local exhaust ventilation or other engineering controls to maintain airborne levels below applicable exposure limits (if established). Provide eyewash station and safety shower.
Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves (material not available). Wear protective clothing as appropriate.
- Respiratory protection: If dust or aerosols are generated and ventilation is inadequate, use an appropriate particulate respirator.
- Hygiene measures: Do not eat, drink, or smoke when using this product. Wash hands after handling.
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
No data available.

10.2 Chemical stability
Stable under recommended storage conditions. No data available.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
Avoid dust formation. Avoid exposure to moisture and extreme conditions. Specific conditions: 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: In preregistration studies, anagrelide was not associated with serum enzyme elevations or with episodes of clinically apparent liver injury. Since its approval, there has been a single published abstract reporting progressive, ultimately fatal cholestasis after liver transplantation and use of anagrelide, but there have been no other published reports of anagrelide hepatotoxicity in the literature. In large, long term follow up studies there have been occasional instances of transient serum enzyme elevations without jaundice or symptoms. The product label for anagrelide mentions abnormal enzymes as an adverse event but not clinically apparent liver injury, hepatitis or jaundice. However, the general clinical experience with anagrelide has been limited. Likelihood score: E* (unlikely, but suspected rare cause of clinically apparent liver injury). /SIGNS AND SYMPTOMS/ There are no reports of overdosage with anagrelide hydrochloride. Platelet reduction from anagrelide therapy is dose-related; therefore, thrombocytopenia, which can potentially cause bleeding, is expected from overdosage. Should overdosage occur, cardiac and central nervous system toxicity can also be expected.
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: /GENOTOXICITY/ Anagrelide hydrochloride was not genotoxic in the Ames test, the mouse lymphoma cell (L5178Y, TK+/-) forward mutation test, the human lymphocyte chromosome aberration test, or the mouse micronucleus test. /Anagrelide hydrochloride/
- Carcinogenicity: No data available.
- Reproductive toxicity: /LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Anagrelide hydrochloride at oral doses up to 240 mg/kg/day was found to have no effect on fertility and reproductive performance of male rats. However, in female rats, at oral doses of 60 mg/kg/day or higher, it disrupted implantation when administered in early pregnancy and retarded or blocked parturition when administered in late pregnancy. /Anagrelide hydrochloride/ /LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Teratology studies have been performed in pregnant rats at oral doses up to 900 mg/kg/day and in pregnant rabbits at oral doses up to 20 mg/kg/day and have revealed no evidence of impaired fertility or harm to the fetus due to anagrelide hydrochloride. /Anagrelide hydrochloride/
- STOT-single exposure: No data available.
- STOT-repeated exposure: /CASE REPORTS/ A 60-year-old white woman with chronic myeloid leukemia who had been treated with hydroxyurea for 7 years was offered anagrelide to control thrombocytosis. She developed severe hypersensitivity pneumonitis soon after the drug was initiated and required intubation and mechanical ventilation. A high-resolution computed tomography scan of the chest demonstrated extensive multifocal ground glass attenuation

and patchy alveolar consolidation involving both lungs. Bronchoalveolar lavage revealed a preponderance of lymphocytes, suggesting hypersensitivity phenomenon, but was otherwise negative for malignancy and other causes of interstitial pneumonitis. An objective causality assessment revealed that an adverse drug event was probable. Discontinuation of anagrelide and hydroxyurea, and institution of corticosteroid therapy resulted in dramatic improvement. To our knowledge, this is the first case report of severe hypersensitivity pneumonitis closely related to anagrelide therapy.
- Aspiration hazard: No data available.

Likely routes of exposure
- No data available.

Symptoms related to the physical, chemical and toxicological characteristics
- In preregistration studies, anagrelide was not associated with serum enzyme elevations or with episodes of clinically apparent liver injury. Since its approval, there has been a single published abstract reporting progressive, ultimately fatal cholestasis after liver transplantation and use of anagrelide, but there have been no other published reports of anagrelide hepatotoxicity in the literature. In large, long term follow up studies there have been occasional instances of transient serum enzyme elevations without jaundice or symptoms. The product label for anagrelide mentions abnormal enzymes as an adverse event but not clinically apparent liver injury, hepatitis or jaundice. However, the general clinical experience with anagrelide has been limited. Likelihood score: E* (unlikely, but suspected rare cause of clinically apparent liver injury).

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
No data available.

12.7 Other adverse effects
No data 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.

Product: Dispose of as hazardous waste unless regulations indicate otherwise. Do not discharge to drains.
Contaminated packaging: Dispose of as unused product or according to local requirements.
Waste code: 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.

15.2 Chemical safety assessment
No data available.

SECTION 16: Other information

SECTION 16: Other information

Product name: Anagrelide
Catalog No.: CS-O-00872
CAS No.: 68475-42-3
Supplier: Clearsynth Labs Ltd., Mumbai, India
Emergency phone: +91-22-245045900
Synonyms: 6;7-dchloro-5;10-dihydro-3H-imidazo[2;1-b]quinazolin-2-one

Revision information: Not available.
Disclaimer: The information provided is believed to be accurate based on available data, but no warranty is expressed or implied. Users must determine suitability for their particular purpose and comply with applicable laws

and regulations.

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