

Safety Data Sheet (SDS)

According to Regulation (EC) No. 1907/2006 (REACH)

Product: IDRA-21

CAS number: 22503-72-6

Revision date: 13 March 2026

1. Identification of the substance and of the company

Product identifier

Product name: IDRA-21

CAS number: 22503-72-6

Synonyms: Ampakine; 7-Chloro-3-methyl-3,4-dihydro-2H-1,2,4-benzothiadiazine 1,1-dioxide.

Relevant identified uses

Chemical reference material

Laboratory research and analytical applications

Not intended for food, drug, cosmetic or household use. A reviewed Cayman SDS states: **for research use – not for human or veterinary diagnostic or therapeutic use.**

Supplier

Rexar

Genestetstraat 3

2394 XK Hazerswoude

Netherlands

Email: info@rexar.nl

Emergency information

Contact local poison control centre.

2. Hazards identification

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Acute toxicity (oral), Category 4

H302 Harmful if swallowed

Acute toxicity (dermal), Category 4
H312 Harmful in contact with skin

Acute toxicity (inhalation), Category 4
H332 Harmful if inhaled.

Label elements

Pictogram: **GHS07**
Signal word: **Warning.**

Hazard statements

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / protective clothing.
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P302+P352 If on skin: Wash with plenty of water.
P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
P321 Specific treatment (see on this label).
P330 Rinse mouth.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

PBT: Not applicable.
vPvB: Not applicable. Cayman also states there are no additional hazards outside the standard hazard classes.

3. Composition / information on ingredients

Substance: IDRA-21

CAS number: 22503-72-6
Molecular formula: **C₈H₉CIN₂O₂S**
Molecular weight: **232.7 g/mol**
Purity: typically **≥98%**.

4. First aid measures

General advice

Symptoms of poisoning may occur after several hours; medical observation after significant exposure is advisable.

Inhalation

Move person to fresh air. If required, provide artificial respiration. Keep patient warm. Consult a doctor if symptoms persist.

Skin contact

Wash thoroughly with soap and water. The reviewed Cayman SDS notes the product generally does not irritate the skin, but because of the H312 classification skin exposure should still be treated seriously.

Eye contact

Rinse cautiously with water for several minutes.

Ingestion

Immediately call a doctor. Rinse mouth if appropriate.

5. Firefighting measures

Suitable extinguishing media

Use fire-fighting measures suitable for the surrounding environment. A solid water stream may be inefficient.

Special hazards

No specific additional combustion hazards are listed in the reviewed Cayman SDS. For a Rexar draft, conservative wording is: combustion may produce sulfur oxides, nitrogen oxides and carbon oxides. This is an inference from the molecular structure and standard decomposition behavior of sulfur- and nitrogen-containing organics.

Protective equipment

Firefighters should wear respiratory protective equipment / self-contained breathing apparatus where needed.

6. Accidental release measures

Personal precautions

Ensure adequate ventilation. Avoid dust formation and inhalation.

Environmental precautions

Do not allow product to enter sewers, surface water or ground water.

Cleanup methods

Ensure adequate ventilation and collect spilled material using suitable laboratory procedures into an appropriate waste container.

7. Handling and storage

Handling

Thorough dedusting. Ensure good ventilation/exhaustion at the workplace.

Storage

Store in accordance with information listed on the product insert. Keep receptacle tightly sealed. No special storage-room requirements are listed in the reviewed Cayman SDS.

8. Exposure controls / personal protection

Exposure limits

No workplace exposure limits requiring monitoring were listed in the reviewed SDS.

Engineering controls

Use adequate ventilation and follow the handling precautions in section 7.

Personal protective equipment

Eye protection: safety glasses

Gloves: protective gloves

Respiratory protection: respiratory filter device for brief/low exposure; more protective respiratory equipment for intensive or prolonged exposure.

9. Physical and chemical properties

Appearance: solid
Odor: characteristic
Molecular formula: C₈H₉ClN₂O₂S
Molecular weight: 232.7 g/mol
Melting point: 209 °C
Boiling point: 405.155 °C
Density at 20 °C: 1.394 g/cm³
Flammability: product is not flammable.

10. Stability and reactivity

Chemical stability

Stable under normal recommended conditions.

Conditions to avoid

No specific incompatibility conditions are highlighted in the reviewed SDS; avoid poor ventilation, dust generation, excessive heat and bad storage practice.

Hazardous decomposition

Conservative Rexar wording: carbon oxides, nitrogen oxides and sulfur oxides may form on decomposition. This is an inference from the substance formula rather than a direct statement in the Cayman SDS.

11. Toxicological information

Based on the reviewed supplier SDS, IDRA-21 is classified as:

Acute toxicity (oral), Category 4 – H302

Acute toxicity (dermal), Category 4 – H312

Acute toxicity (inhalation), Category 4 – H332.

Additional notes from the same SDS:

- skin: generally not irritating
 - sensitisation: no sensitizing effects known
 - no major additional toxicology findings listed.
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12. Ecological information

Limited ecological data available.

PBT: Not applicable.

vPvB: Not applicable.

Avoid release into the environment and prevent entry into drains or waterways.

13. Disposal considerations

Dispose of according to local regulations and do not allow product to enter sewage systems. This follows the spill/disposal handling line of the reviewed supplier SDS.

14. Transport information

The reviewed Cayman SDS states the substance is **not regulated** under UN model transport rules. For Rexar wording:

Not classified as dangerous goods according to transport regulations:

ADR (road)

IMDG (sea)

IATA (air).

15. Regulatory information

This product is supplied as a **chemical reference material for laboratory use**.

Classification line used in this draft:

Acute Toxicity Category 4 – H302, H312, H332 with GHS07 and Warning.

16. Other information

This Safety Data Sheet provides information for safe handling in laboratory environments.

The product is supplied **for research and analytical use only**.

The information provided is based on reviewed public supplier safety documentation and chemical identity records and is believed to be accurate, but does not constitute a guarantee of product properties.