

Safety Data Sheet

Revision Date: 9/7/2022

Section 1: Chemical Identification

1.1 Chemical Identification

Product Name: Quinine sulfate dihydrate

Alternative Name:

Catalog Number: Q-500

1.2 Relevant Uses and Uses Advised Against

Recommended use: This product is not for use in humans. It is for research purposes

only.

1.3 Supplier Contact Information

Distributed by: Gold Biotechnology, Inc.

1328 Ashby Rd.

St. Louis, MO 63132

Phone: (314) 890-8778 **Fax:** (314) 890-0503

Email: contactgoldbio86@goldbio.com

1.4 Emergency Contact Information

Emergency Phone: (800)248-7609 (Monday-Friday, 9:00 a.m. – 5:00 p.m. CST)

Section 2: Hazardous Information

2.1 GHS Classification

Skin Irritation (Category 2)

Eye Irritation ()

Specific Target Organ Toxicity, Single Exposure (Category 3)

2.2 GHS Label Elements, Including Precautionary statements



Warning

2.3 Hazard Statements

H315: Causes skin irritation

H319: Causes serious eye irritation H335: May cause respiratory irritation

2.4 Precautionary Statements

P261: Avoid breathing dust/fume/gas/mist/vapours/spray

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P264: Wash skin thoroughly after handling

P271: Use only outdoors or in a well-ventilated area

P280: Wear protective gloves/protective clothing/eye protection/face protection

SDS Date: 9/7/2022

Page **2** of 8

P302+352: IF ON SKIN: Wash with soap and water

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses if present and easy to do – continue rinsing P332+313: If skin irritation occurs: Get medical advice/attention P337+313: If eye irritation persists get medical advice/attention P362: Take off contaminated clothing and wash before reuse

P403+233: Store in a well ventilated place. Keep container tightly closed

P405: Store locked up

P501: Dispose of contents/container to an approved waste disposal plant

2.6 Target Organs

Respiratory system

Section 3: Composition/Information on Ingredients

3.1 Composition

Identity: Quinine sulfate dihydrate

IUPAC: (R)-[(2S,4S,5R)-5-ethenyl-1-azabicyclo[2.2.2]octan-2-yl]-(6-methoxyquinolin

-4-yl)methanol;sulfuric acid;dihydrate

Synonyms:

CAS Number: 6119-70-6Molecular Formula: $C_{40}H_{54}N_4O_{10}S$ Molecular Weight: 782.94 g/mol

Section 4: First Aid Measures

4.1 Detailed First Aid Measures

Inhalation: If breathed in, move person into fresh air. If not breathing, give

artificial respiration. Consult a physician.

Skin: Immediately wash skin copiously with soap and water. Take victim

immediately to hospital. Consult a physician.

Eye: Immediately rinse out with water for at least 15 minutes. Assure

adequate flushing by separating the eyelids with fingers. Consult a

physician.

Ingestion: Wash out mouth with water. Drink plenty of water. Consult a

physician. Never give anything by mouth to an unconscious person.

Notes to Physician: Treat symptomatically and supportively.

4.2 Most Important Symptoms And Effects, Either Acute Or Delayed

The most important known symptoms and effects are described in the labeling (see section2). And /or in section 11.

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4.3 Indication of immediate medical attention and special treatment needed

SDS Date: 9/7/2022

Page 3 of 8

Not available

Section 5: Fire Fighting Measures

5.1 Conditions of flammability:

Not flammable or combustible.

5.2 Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.3 Specific hazards arising from the chemical

During a fire, highly toxic gases may be generated by thermal decomposition or combustion – Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides.

5.4 Specific protective actions for fire-fighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

6.2 Environmental precautions:

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up:

Soak up with absorbent material, discard.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Always wear personal protective equipment (PPE, see section 8).

7.2 Conditions for safe storage, including and incompatibilities:

Keep container tightly closed.

Store at 4°C.

Section 8: Exposure Controls / Personal Protection

8.1 Control Parameters:

Contains no substances with occupational exposure limit values.

8.2: Appropriate engineering controls:

Contains no substances with occupational exposure limit values.

8.3 Personal Protective Equipment (PPE):

Eye/Face Protection: Safety glasses with side-shields conforming to EN166. Use equipment

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SDS Date: 9/7/2022 Page **4** of 8

for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique - without touching outer surface of glove - 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. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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 under appropriate government standards such as NIOSH (US) or CEN (EU).

Other Protective Clothing or Equipment: Wear appropriate protective clothing to prevent exposure.

Section 9: Physical and Chemical Properties

9.1 General chemical and physical properties

Appearance: White Powder
Odor: Not Available
Odor Threshold: Not Available
pH: Not Available

Melting Point: 225°C

Not Available **Freezing Point: Boiling Point/Range:** Not Available Flash Point: Not Available Not Available **Evaporation Rate:** Lower Explosion Limit: Not Available **Upper Explosion Limit:** Not Available Vapor Pressure: Not Available Vapor Density: Not Available **Relative Density:** Not Available Solubility: Not Available

Partition Coefficient

n-octanol/water: Not Available

Auto-Ignition

Temperature: Not Available

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SDS Date: 9/7/2022 Page **5** of 8

Decomposition

Temperature: Not Available Viscosity: Not Available

Section 10: Stability and Reactivity Data

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:

Incompatible materials.

10.5 Incompatible materials:

Strong oxidizing agents.

10.6 Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions. – Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides.

Section 11: Toxicological Information

11.1 Toxicological effects

Acute toxicity:

Skin corrosion/irritation:

Not available.

Respitory or skin sensitization:

May cause respiratory irritation

Germ cell mutagenicity:

Not 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 probable, possible or confirmed human

carcinogen by ACGIH.

NTP: 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 NTP.

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SDS Date: 9/7/2022 Page **6** of 8

OSHA: No component of this product present at levels greater than or equal

to 0.1% is identified as a carcinogen or potential carcinogen by

OSHA.

Reproductive toxicity:

Not available.

STOT-single exposure:

Inhalation - May cause respiratory irritation.

STOT-repeated exposure:

Not available.

Aspiration hazard:

Not available.

Likely routes of exposure:

Respiratory organs, mouth, skin, and eyes.

Symptoms of exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information:

Prolonged or repeated exposure can cause:, Blood disorders, Vomiting, Diarrhea,

Section 12: Ecological Information

12.1 Toxicity:

Not available.

12.2 Persistence and degradability:

Inherent biodegradability.

12.3 Bioacumulative potential:

Does not bioaccumulate.

12.4 Mobility in soil:

Not available.

12.5 Other adverse effects:

None.

Section 13 Disposal Considerations

Dispose of product in accordance with local rules and regulations.

Section 14: Transport Information

14.1 US Department of Transportation (DOT)

This material is considered to be non-hazardous for transport.

14.2 International Maritime Dangerous Goods (IMDG):

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SDS Date: 9/7/2022 Page **7** of 8

This material is considered to be non-hazardous for transport.

14.2 International Air Transportation Association (IATA)

This material is considered to be non-hazardous for transport.

Section 15: Regulatory Information

SARA 302 Components:

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards:

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components:CAS - No.Quinine sulfate dihydrate6119-70-6Pennsylvania Right To Know Components:CAS - No.Quinine sulfate dihydrate6119-70-6New Jersey Right To Know Components:CAS - No.Quinine sulfate dihydrate6119-70-6

California Prop. 65 Components:

This product does not contain any chemical known to the State of California to cause cancer, birth, or any other reproductive defects.

Section 16: Other Information

While Gold Biotechnology, Inc. believes the information contained herein to be true and accurate, it has relied on information provided by others. Gold Biotechnology, INC. makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or with respect to the results to be obtained from the use of the product. Gold Biotechnology, Inc. disclaims all liability with respect to the use of this product, including without limitation, liability for injury to the user or third-party persons.

Preparation Information

Gold Biotechnology Content/Marketing Department (800) 248-7609 Last updated: 9/7/2022

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Gold Biotechnology Quinine sulfate dihydrate FM-00002 / Q-500 SDS Date: 9/7/2022 Page **8** of 8