

Safety Data Sheet

Revision Date: 10/28/2019

Section 1: Chemical Identification

1.1 Chemical Identification

Product Name: Marbofloxacin

Alternative Name:

Catalog Number: M-810

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

Chronic Aquatic Toxicity (Category 3)
Acute Aquatic Toxicity (Category 3)

2.2 GHS Label Elements, Including Precautionary statements



Warning

2.3 Hazard Statements

H412: Harmful to aquatic life with long lasting effects

2.4 Precautionary Statements

P273: Avoid release to the environment

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

Section 3: Composition/Information on Ingredients

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SDS Date: 10/28/2019 Page **2** of 7

3.1 Composition

Identity: Marbofloxacin

IUPAC: 7-fluoro-2-methyl-6-(4-methylpiperazin-1-yl)-10-oxo-4-oxa-1,2-diazatricyclo

[7.3.1.05,13]trideca-5(13),6,8,11-tetraene-11-carboxylic acid

Synonyms: 9-Fluoro-3-methyl-10-(4-methylpiperazin-1-yl)-7-oxo-2,3-dihydro-7H-

[1,3,4]oxadiazino[6,5,4-ij]quinoline-6-carboxylic acid

CAS Number: 115550-35-1 Molecular Formula: $C_{17}H_{19}FN_4O_4$ Molecular Weight: 362.36 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.

4.3 Indication of immediate medical attention and special treatment needed

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), Hydrogen Fluoride.

5.4 Specific protective actions for fire-fighters:

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

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SDS Date: 10/28/2019 Page **3** of 7

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 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

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exposure.

SDS Date: 10/28/2019 Page **4** of 7

Section 9: Physical and Chemical Properties

9.1 General chemical and physical properties

Appearance: Powder Odor: Not Available Odor Threshold: Not Available Not Available pH: 268 - 269°C **Melting Point: Freezing Point:** Not Available **Boiling Point/Range:** Not Available Flash Point: Not Available **Evaporation Rate:** Not Available Lower Explosion Limit: Not Available **Upper Explosion Limit:** Not Available Vapor Pressure: Not Available Vapor Density: Not Available

Partition Coefficient

Relative Density:

n-octanol/water: log Pow: -0.8 at 25°C

1.55 g/cm3

Not Available

Auto-Ignition

Solubility:

Temperature: Not Available

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.

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SDS Date: 10/28/2019 Page **5** of 7

10.5 Incompatible materials:

Strong oxidizing agents.

10.6 Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions. – Carbon Oxides, Nitrogen Oxides (NOx), Hydrogen Fluoride.

Section 11: Toxicological Information

11.1 Toxicological effects

Acute toxicity:

Marbofloxacin Oral: LD_{50} (Rat) = 2720 - 3772 mg/kg

Skin corrosion/irritation:

Not available.

Respitory or skin sensitization:

Not available.

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.

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:

Not available.

STOT-repeated exposure:

Not available.

Aspiration hazard:

Not available.

Likely routes of exposure:

Respiratory organs, mouth, skin, and eyes.

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SDS Date: 10/28/2019 Page **6** of 7

Symptoms of exposure:

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

Additional Information:

RTECS: UU8815140

Section 12: Ecological Information

12.1 Toxicity:

 LC_{50} - (Daphnia magna) - 62.3 mg/L - 48 h

12.2 Persistence and degradability:

Not available.

12.3 Bioacumulative potential:

Not available.

12.4 Mobility in soil:

Not available.

12.5 Other adverse effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

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):

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:

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SDS Date: 10/28/2019 Page **7** of 7

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:

Chronic Health Hazard

Massachusetts Right To Know Components:CAS - No.Marbofloxacin115550-35-1Pennsylvania Right To Know Components:CAS - No.Marbofloxacin115550-35-1New Jersey Right To Know Components:CAS - No.Marbofloxacin115550-35-1

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: 10/28/2019

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