MATERIAL SAFETY DATA SHEET

Cat# 2368-1, Fumagillin

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Fumagillin PRODUCT CODES: Cat# 2368-1

MANUFACTURER: BioVision, Inc.

ADDRESS: 155 S. Milpitas Boulevard, Milpitas, CA 95035

EMERGENCY PHONE: 858-373-8066

CHEMTREC PHONE:

OTHER CALLS: 408-493-1800 **FAX PHONE:** 408-493-1801

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Description	Volume	Safety Information
Fumagillin	Solid	1 mg	See below

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SECTION 3: HAZARDS IDENTIFICATION

Product Name/Chemical Name	CAS Number	EC-No.	Molecular Weight	Chemical Formula
Fumagillin	23110-15-8	245-433-8	458.54	$C_{26}H_{34}O_{7}$

Fumagillin:

Emergency Overview

OSHA Hazards: Harmful by ingestion

GHS Classification: Acute toxicity, Oral (Category 4) GHS Label elements, including precautionary statements

Pictogram:



Signal word: Warning

Hazard statement(s): H302 Harmful if swallowed.

Precautionary statement(s): P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

HMIS Classification Health hazard: 1 Flammability: 0 Physical hazards: 0

NFPA Rating

Health Hazard: 1

Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. **Skin:** May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation. Ingestion: Harmful if swallowed.

SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Flush eyes with water as a precaution.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5: FIRE-FIGHTING MEASURES

Condition of flammability: Not flammable or combustible.

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary. Hazardous combustion products: Hazardous decomposition products formed under fire conditions— see section 10.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Avoid breathing dust.

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Environmental precautions: Do not let product enter drains.

Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20°C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) 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.

Eye 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 and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Fumagillin	
Appearance:	Off-white solid	
pH:	No data available	
Water Solubility:	No data available	
Other Solubility:	EtOH (~1 mg/ml)	
Boiling Point (°C):	No data available	
Melting Point (°C):	197-198 °C (386.6-388.4 °F)	
Flash Point (°C):	No data available	
Ignition Temperature (°C):	No data available	
Density: No data available		

SECTION 10: STABILITY AND REACTIVITY

Property	Fumagillin	
Chemical stability Stable under recommended storage condition		
Conditions to avoid:	No data available	
Materials to avoid:	Materials to avoid: No data available	
Hazardous decomposition products:	Carbon oxides	

SECTION 11: TOXICOLOGICAL INFORMATION

Fumagillin:

Acute toxicity: LD50 Oral – mouse – 2,000 mg/kg Skin corrosion/irritation: no data available Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

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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 a carcinogen or potential

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carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated

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: no data available

Teratogenicity: Developmental toxicity - rat - unreported → Effects on Embryo or Fetus: Fetotoxicity (except death, e.g. stunted fetus).

Effects on Fertility: Post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants).

Specific target organ toxicity – single exposure (GHS): no data available Specific target organ toxicity – repeated exposure (GHS): no data available Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. **Skin:** May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation. **Ingestion:** Harmful if swallowed.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been

thoroughly investigated.

Additional information: RTECS: HE1750000

SECTION 12: ECOLOGICAL INFORMATION

Fumagillin:

Persistence and degradability: no data available

Toxicity: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available Other adverse effects: no data available

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

Fumagillin:

DOT (US): Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

SECTION 15: REGULATORY INFORMATION

Fumagillin:

OSHA Hazards: Harmful by ingestion

SARA 302 Components: SARA 302: No chemical 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 II, Section 313.

SARA 311/312 Hazards: Acute Health Hazard

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components: Fumagillin, CAS-No. 23110-15-8 New Jersey Right To Know Components: Fumagillin, CAS-No. 23110-15-8

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or

any other reproductive harm.

EU regulations

Component	Risk Phrases	Safety Phrases
Fumagillin	R22	R36

SECTION 16: OTHER INFORMATION

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. BioVision, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.