

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Hygromycin B

### Other means of identification

**Product Code(s)** A2813

**UN/ID no.** 2811

**Synonyms** No information available

**Product Use** For Laboratory Research Use Only.

### Supplier/Manufacturer

Biomatik Corporation  
9-140 McGovern Dr.  
Cambridge, Ontario N3H 4R7  
Canada

**Telephone Number** 1-519-489-7195

**E-mail Address** info@biomatik.com

**Emergency Telephone Number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 2
Acute Toxicity - Dermal	Category 2
Acute toxicity - Inhalation (Vapors)	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Respiratory Sensitization	Category 1

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

H300 - Fatal if swallowed

H310 - Fatal in contact with skin

H318 - Causes serious eye damage

H330 - Fatal if inhaled

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Appearance** White to Light brown**Physical State** Powder**Odor** No information available**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not get in eyes, on skin, or on clothing  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Wear respiratory protection  
 Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Specific treatment (see .? on this label)  
 Specific treatment is urgent (see .? on this label)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor  
 IF ON SKIN: Wash with plenty of water and soap  
 Immediately call a POISON CENTER or doctor  
 Take off immediately all contaminated clothing and wash it before reuse  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 Immediately call a POISON CENTER or doctor  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor  
 Rinse mouth

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not regulated

**Other Information**

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Hygromycin B	31282-04-9	250-545-5	95-100	Not applicable

### 4. FIRST AID MEASURES

**First Aid Measures****Eye Contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.  
 Consult a physician.

**Skin Contact**

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

**Inhalation** Move to fresh air. If breathing becomes difficult, give oxygen. May cause allergic respiratory reaction. Consult a physician.

**Ingestion** Call a physician or Poison Control Center immediately. Clean mouth with water and afterwards drink plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms/Effects** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Dry chemical, CO<sub>2</sub>, appropriate foam.

**Unsuitable Extinguishing Media** No information available.

**Specific Hazards Arising from the Chemical**

Fine powder is capable of creating a dust explosion.

**Hazardous Combustion Products** Carbon oxides. Nitrogen oxides (NO<sub>x</sub>).

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal protection** Ensure adequate ventilation, especially in confined areas.

**Environmental Precautions**

**Environmental Precautions** See Section 12 for additional Ecological information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Protect from light and moisture.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from light.

**Incompatible Products** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hygromycin B	-	-	-

### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Avoid contact with eyes. Safety glasses with side-shields.

**Skin and Body Protection** Wear protective gloves/clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Powder	<b>Odor</b>	No information available
<b>Appearance</b>	White to Light brown	<b>Odor Threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point		
Boiling Point/Range	No information available	
Flash Point (High in °C)	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

**Other Information**

<b>Softening Point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content</b>	No information available
<b>Density</b>	No information available
<b>Bulk Density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to Avoid**

Protect from light.

**Incompatible Materials**

None known based on information supplied.

**Hazardous Decomposition Products**

Carbon oxides. Nitrogen oxides (NOx).

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	May be fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Eye Contact</b>	May cause irreversible damage to eyes.
<b>Skin Contact</b>	May be fatal if absorbed through skin.
<b>Ingestion</b>	May be fatal if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hygromycin B	= 13 mg/kg ( Rat )	-	= 2220 µg/m <sup>3</sup> ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hygromycin B	-	-	-	-

**Reproductive Toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Chronic Toxicity** Suspected mutagen. Suspected teratogen.

**Target Organ Effects** Eyes, Ears, Reproductive system.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Hygromycin B	-	-	-

**Persistence and Degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical Name	Partition coefficient
Hygromycin B	-

**Other Adverse Effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Waste Disposal Method**

Dispose of material in accordance with all federal, state, and local regulations.

**Contaminated Packaging**

Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Hygromycin B	-	-	-	-

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Hygromycin B	-	-	-	-

Chemical Name	California Hazardous Waste Status
Hygromycin B	-

## 14. TRANSPORT INFORMATION

**DOT**

UN/ID no. 2811  
 Proper shipping name TOXIC SOLID, ORGANIC, N.O.S. (CONTAINING HYGROMYCIN B)  
 Hazard Class 6.1  
 Packing Group II

**IATA**

UN/ID no. 2811  
 Proper shipping name TOXIC SOLID, ORGANIC, N.O.S. (CONTAINING HYGROMYCIN B)  
 Hazard Class 6.1  
 Packing Group II

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Does not comply
<b>DSL/NDL</b>	Does not comply
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Does not Comply
<b>IECSC</b>	Complies
<b>KECL</b>	Does not Comply
<b>PICCS</b>	Does not Comply
<b>AICS</b>	Does not Comply

### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Hygromycin B	-

#### SARA 311/312 Hazard Categories

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hygromycin B	-	-	-	-

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Hygromycin B	-	-	-

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Hygromycin B	-

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hygromycin	-	-	-

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not regulated

**16. OTHER INFORMATION****Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**