



# Safety Data Sheet

Revision date: Sep-2020

## Hygromycin B (50 mg/mL)

### 1. IDENTIFICATION OF THE PREPARATION/SUBSTANCE AND OF THE COMPANY

Preparation Name: Hygromycin B (50 mg/mL)  
Catalogue number of the product: CC523-0010  
Use of the preparation:  
For laboratory use.  
Company identification:  
Genedirex, Inc.  
Site: <http://www.genedirex.com>

### 2. HAZARDS IDENTIFICATION

GHS - Classification  
Signal Word  
DANGER



#### Health hazards

Acute oral toxicity	Category 3
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1

Physical hazards                      Not Hazardous  
Environmental hazards              Not Hazardous

#### Hazard Statements

H301 - Toxic if swallowed  
H318 - Causes serious eye damage  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

#### Precautionary Statements

##### Prevention

P264 - Wash hands thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P270 - Do not eat, drink or smoke when using this product  
P284 - In case of inadequate ventilation wear respiratory protection

##### Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P330 - Rinse mouth  
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

##### Storage

Not Applicable

##### Disposal

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

##### Other hazards

Not Applicable



# Safety Data Sheet

Revision date: Sep-2020

## Principle Routes of Exposure

### Potential Health Effects

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons. May cause sensitization by skin contact.
Inhalation	May cause irritation of respiratory tract. May cause sensitization by inhalation.
Ingestion	May be harmful if swallowed.
Specific effects	
Carcinogenic effects	None
Mutagenic effects	None.
Reproductive toxicity	None.
Sensitization	May cause sensitization by inhalation and skin contact.
Target Organ Effects	None under normal use conditions.

## HMIS

Health	4
Flammability	0
Reactivity	0

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Component	CAS-No	EINECS-No	Weight %
Hygromycin B 31282-04-9 ( 3-7 )	31282-04-9	250-545-5	3-7

We recommend handling all chemicals with caution.

## 4. FIRST-AID MEASURES

### Description of first aid measures

**Skin contact** Rinse skin with water. Immediate medical attention is not required

**Eye contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion** Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

**Inhalation** Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

**Notes to Physician** Treat symptomatically.

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

H301 - Toxic if swallowed H318 - Causes serious eye damage H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

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

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

## 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media

Special protective equipment for firefighters

Special hazards arising from the substance or mixture

Protective equipment and precautions for firefighters

Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

No information available

None known

Not known.

Standard procedure for chemical fires.



# Safety Data Sheet

Revision date: Sep-2020

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Always wear recommended Personal Protective Equipment

Use personal protection equipment

See section 8 for more information

Environmental precautions

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

## 7. HANDLING AND STORAGE

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool, and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

For research use only.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Hygromycin B	None	None	None	None

Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
Hygromycin B	None	None	None

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

Respiratory protection

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Hand protection

Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

Eye protection

Tight sealing safety goggles.

Skin and Body Protection

Wear suitable protective clothing.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Liquid

Odor

No data

Odor Threshold

No data

Molecular Weight

No data

Melting point / melting range

°C No data

°F No data

Boiling point / boiling range

°C No data

°F No data

Flash point

°C No data

°F No data

Autoignition Temperature

°C No data

°F No data

Decomposition temperature

°C No data

°F No data



# Safety Data Sheet

Revision date: Sep-2020

Evaporation rate	No data
Flammability (solid, gas)	No data
Upper explosion limit	No data
Lower explosion limit	No data
Vapor Pressure	No data
Vapor density	No data
Relative density	No data
Specific gravity	No data
Solubility	No data
Partition coefficient:	
n-octanol/water	No data
Viscosity	No data
Explosive properties	No data
Oxidizing properties	No data
Other information	No data.

## 10. STABILITY AND REACTIVITY

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reaction has not been reported.

Conditions to avoid No information available.

Incompatible materials No dangerous reaction known under conditions of normal use.

Hazardous decomposition products No data available

## 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Hygromycin B	= 13 mg/kg (Rat)	No data available	=2220µg/m3(Rat)

Principal Routes of Exposure

Acute toxicity Toxic if swallowed.

Skin corrosion/irritation Serious eye damage/eye irritation

Serious eye damage/irritation Causes serious eye damage

Respiratory or skin sensitization May cause sensitization by inhalation

Specific target organ toxicity

(STOT) – single exposure

Data are conclusive but insufficient for classification

Specific target organ toxicity

(STOT) – repeated exposure

Data are conclusive but insufficient for classification

Carcinogenicity Data are conclusive but insufficient for classification

Germ cell mutagenicity Data are conclusive but insufficient for classification

Reproductive toxicity Data are conclusive but insufficient for classification

Aspiration hazard Data are conclusive but insufficient for classification

## 12. ECOLOGICAL INFORMATION

Toxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Hygromycin B	No data available	No data available	No data available	No data available	No data available



# Safety Data Sheet

Revision date: Sep-2020

Persistence and degradability	No information available.
Bioaccumulative potential	No information available.
Results of PBT and vPvB assessment	No information available
Other adverse effects	No information available

### 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional, or national/federal regulations

### 14. TRANSPORT INFORMATION

IATA / ADR / DOT-US / IMDG

Classified as dangerous in the meaning of transport regulations

UN number	2810	
UN proper shipping name	Toxic liquid, organic, n.o.s. (Hygromycin B Solution)	
Transport hazard class(es)	6.1	
Packing group	III	
Special precautions for user	Not Applicable	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		Not Applicable.

### 15. REGULATORY INFORMATION

Component	US TSCA
Hygromycin B 31282-04-9 (3-7%)	-

US Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

D1B - Toxic materials

D2A - Very toxic materials

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

National Regulations – Brazil

Chemical Name	CAS No.	Brazil - National Agency for Sanitary Surveillance (ANVISA)	Brazil - National List of Carcinogen Agents to Humans (LINACH)
Hygromycin B	31282-04-9	Not Listed	Not Listed

### 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. GeneDireX, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.