# Hygromycin B: sc-29067



#### The Power to Question

## MATERIAL SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Hygromycin B **Product Number:** sc-29067

Supplier: Santa Cruz Biotechnology, Inc.

> 2145 Delaware Avenue Santa Cruz, CA 95060

800.457.3801 or 831.457.3800

**Emergency:** ChemWatch

Within the US & Canada: 877-715-9305

Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

#### 2. HAZARDS IDENTIFICATION

## Classification according to Regulation (EC) No 1272/2008

Actue toxicity, Ingestion (Category 3) Acute toxicity, Dermal (Category 2) Acute toxicity, Inhalation (Category 1) Respiratory sensitizer (Category 1) Serious eye damage (Category 1)

Skin sensitizer (Category 1)

Specific target organ toxicity — single exposure (Category 3)

## Labeling according to Regulation (EC) No 1272/2008:

The substance is classified and labelled according to the CLP regulation.

**Pictograms** 



Signal word Danger

#### **Hazard statements**

Toxic if swallowed. H301 Fatal in contact with skin. H310

H330 Fatal if inhaled.

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

May cause respiratory irritation H335 H318 Causes serious eye damage. H317 May cause an allergic skin reaction.

## Classification according to Directive 67/548/EEC or Directive 1999/45/EC:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

## **Hazard statements**

Toxic, Sensitizing, Irritant



Hazard codes T; Xn; Xi Risk codes and phrases

Toxic by inhalation, in contact with skin and if swallowed. R23/24/25

R36 Irritating to eyes.

R42/43 May cause sensitization by inhalation and skin contact.

## Safety phrases

S4 Keep away from living quarters.

S9 Keep container in a well-ventilated place.

S23 Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the

manufacturer).

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label

where possible).

S60 This material and its container must be disposed of as hazardous waste

#### Information concerning particular hazards for human and environment

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms:** Hygrovetine; D-streptamine

**Formula:** C20H37N3O13

Molecular weight: 527.52

 CAS-No.
 EC-No.
 Index-No.
 Concentration

 Hygromycin B
 31282-04-9
 250-545-5
 50 mg/ml in PBS

#### 4. FIRST AID MEASURES

#### General advice

Immediately remove any clothing soiled by the product. Remove breathing equipment only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

#### If inhaled

Supply fresh air. If required, provide artificial respiration. In case of unconsciousness place patient stably in side position for transportation.

### In case of skin contact

Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing. Seek immediate medical advice.

#### In case of eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

#### If swallowed

Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

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

No further relevant information available.

#### 5. FIREFIGHTING MEASURES

#### Suitable extinguishing media

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### **Hazardous combustion products**

No further relevant information available.

## Special protective equipment for firefighters

Mouth respiratory protective device. Wear self-contained respiratory protective device. Do not inhale explosion gases or combustion gases. Wear fully protective suit.

### 6. ACCIDENTAL RELEASE MEASURES

## **Personal precautions**

Avoid formation of dust. Wear protective clothing.

## **Environmental precautions**

Do not allow to enter sewers/ surface or ground water.

#### Methods and materials for containment and clean up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols. Keep respiratory protective device available

#### Conditions for safe storage

Store tightly sealed in a cool, dry and well ventilated location (see label for storage temperature and additional specific information). Keep away from heat, sources of ignition and incompatibles such as oxidizing agents. Keep container tightly sealed. Store under lock and key and with access restricted to technical experts or their assistants only. Store at 4° C.

#### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

## Personal protective equipment

### **Respiratory protection**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

#### Hand protection

Wear protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### Eye protection

Tightly sealed goggles.

## Hygiene measures

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes. Avoid contact with the eyes and skin

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form Odor threshold Melting point/Melting range Flash point Decomposition temperature Lower explosion limit Vapor pressure Relative density	Liquid No data available. Undetermined. Not applicable. Not determined. Not determined. Not applicable.	Odor pH-value Boiling point/Boiling range Flammability (solid, gaseous) Self-igniting: Upper explosion limit Density	Characteristic Not applicable Undetermined. Not applicable. Not determined. Not determined. Not determined. Not determined.
Flash point	Not applicable.	Flammability (solid, gaseous)	Not applicable.
Decomposition temperature	Not determined.	Self-igniting:	Not determined.
Lower explosion limit	Not determined.	Upper explosion limit	Not determined.
Vapor pressure	Not applicable.	Density	Not determined.
Relative density	Not determined.	Vapor density	Not applicable.
Evaporation rate	Not applicable.	Solubility (water)	Not determined.
Partition coefficient	Not determined.	Viscosity	Not applicable.
(n-octanol/water)			

#### 10. STABILITY AND REACTIVITY

## **Chemical reactivity**

No dangerous reactions known.

**Chemical stability** 

Stable.

## Materials to avoid

Avoid strong oxidizing agents.

### Conditions to avoid

No further relevant information available.

#### **Hazardous decomposition products**

No dangerous decomposition products known.

### 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity** 

Selected LD50 and LC50s: LC50/4h - Inhalative 0.00222 mg/l (rat)

LD50 - Intraperitoneal 63 mg/kg (rat)

13mg/kg (guinea pig)

LD50 - Intravenous 6 mg/kg (mouse)

Primary irritant effect:

on the skin: Not determined. on the eye: Irritating effect.

Sensitization

Sensitization possible through inhalation and skin contact.

### 12. ECOLOGICAL INFORMATION

Toxicity Persistence and degradability

no data available no data available

Bioaccumulative potential General Notes

no data available Water hazard class 3 (German Regulation) (Self-

PBT and vPvB assessment assessment): extremely hazardous for water.

no data available

Mobility in soil

no data available

Do not allow product to reach ground water, water course
or sewage system, even in small quantities. Danger to
drinking water if even extremely small quantities leak into

the ground.

## 13. DISPOSAL CONSIDERATIONS

#### Product

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

#### Contaminated packaging

Disposal must be made according to official regulations.

## 14. TRANSPORTATION INFORMATION

**UN-Number** 

ADR, IMDG, IATA UN2810

**UN** proper shipping name

ADR 2810 TOXIC LIQUID, ORGANIC, N.O.S. (Hygromycin B (liquid))

IMDG, IATA TOXIC LIQUID, ORGANIC, N.O.S. (Hygromycin B (liquid))

Transport hazard class(es)

**ADR** 

Class: 6.1 Toxic substances.

**Label:** 6.1

IMDG, IATA

Class: 6.1 Toxic substances.

**Label:** 6.1

Packing group

ADR, IMDG, IATA

**Environmental hazards** 

Marine pollutant: No

Special precautions for user Warning: Toxic substances.

Danger code (Kemler): 60 EMS Number: F-A,S-A

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

Transport/Additional information: ADR

Tunnel restriction code: D/E

**UN "Model Regulation"** 

UN2810, TOXIC LIQUID, ORGANIC, N.O.S. (Hygromycin B (liquid)), 6.1, II

## 15. REGULATORY INFORMATION

**Chemical safety assessment** 

A Chemical Safety Assessment has not been carried out.

## **16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

10/24/2013