SAFETY DATA SHEET (SDS)



Product Name: Hygromycin B Solution

Product Number: MIR 5930

This kit contains the following components. The required Safety Data Sheets for identified hazardous components are appended.

• Hygromycin B Solution

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Section 1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier:

1.1.1.Product Name: Hygromycin B Solution

1.1.2.Product Code: MIR 5930 **1.1.3.CAS No.:** Not applicable.

1.2. Relevant Identified Uses of the Mixture and Uses Advised Against:

1.2.1.Identified Uses: For research use only.1.2.2.Uses Advised Against: Not known.

1.3. Details of the Supplier of the SDS:

1.3.1.Company: Mirus Bio LLC

1.3.2.Address: 5602 Research Park Blvd, Suite 210, Madison, WI 53719, USA

1.3.3.Telephone No.: 888.530.0801 (Toll Free within the U.S.) or +1.608.441.2852

1.3.4.Fax: +1.608.441.2849

1.3.5.Email: info@mirusbio.com

1.4. Emergency Telephone No.:

1.4.1.US and Canada: +1.800.633.8253 **1.4.2.**International: +1.801.629.0667

Section 2. HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture:

US CFR 1910.1200 Acute toxicity, Oral (Category 2), H300

Acute toxicity, Inhalation (Category 1), H330 Acute toxicity, Dermal (Category 2), H310 Serious eye damage (Category 1), H318

2.2. Label Elements:

2.2.1.Product Name: Hygromycin B Solution

2.2.2.Hazard Pictogram(s):

2.2.3.Signal Word(s): Danger

Hazard Statement(s): H300+H310+H330: Fatal if swallowed, in contact with skin or

if inhaled.

H318: Causes serious eye damage.

2.2.4.Precautionary Statement(s):

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other Hazards: Not applicable.2.4. Additional Information: None.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances:

Not applicable.

3.2. Mixtures:

Hazardous Ingredient(s)	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Hygromycin B	31282-04-9	5	Acute tox., Oral 2 H300 Acute tox., Derm. 2 H310 Acute tox., Inh. 1 H330 Serious eye dam. 1 H318	GHS 05 GHS 06

Section 4. FIRST AID MEASURES

- 4.1. Description of First Aid Measures:
 - **4.1.1.Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
 - **4.1.2.Skin Contact:** Take off all contaminated clothing immediately. Wash off with soap and plenty of water. Consult a physician.
 - **4.1.3.Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a poison center and/or doctor.
 - **4.1.4.Ingestion:** Rinse mouth with water. Call a poison center and/or doctor.
- 4.2. Most Important Symptoms and Effects, Both Acute and Delayed:

May cause irritation to respiratory tract or eyes if directly contacted. May cause an allergic skin reaction.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed:

Call a poison center and/or doctor. Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- 5.1. Extinguishing Media:
 - 5.1.1. Suitable Extinguishing Media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.1.2. Unsuitable Extinguishing Media:

No information available.

5.2. Specific Hazards Arising from the Mixture:

Carbon oxides, nitrogen oxides, and sulfur oxides.

5.3. Advice for Firefighters:

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures:

Provide adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection.

6.2. Environmental Precautions:

This material and its container must be disposed of in a safe way.

6.3. Methods and Materials for Containment and Cleaning Up:

Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for Safe Handling:

Handle in accordance with good industrial hygiene and safety practices. Wear protective gloves and eye/face protection.

7.2. Conditions for Safe Storage, Including Any Incompatibilities:

Store tightly closed in a well-ventilated place. Keep cool.

7.2.1.Storage Temperature: 4°C.

7.2.2.Storage Life: Stable under normal conditions.

7.3. Specific End Use(s): For research use only.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters:

8.1.1.Occupational Exposure Limits: Not applicable.

8.2. Exposure Controls:

8.2.1. Appropriate Engineering Controls:

Ensure adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2.Personal Protective Equipment:

- **8.2.2.1. Eye Protection:** Tightly fitting safety glasses with side shields.
- **8.2.2.2. Skin Protection:** Protective clothing and gloves.
- **8.2.2.3. Respiratory Protection:** Normally no personal respiratory protection is necessary.
- **8.2.2.4.** Thermal Hazards: None known.

8.3. Environmental Exposure Controls:

Avoid release to the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties:

9.1.1.Appearance Liquid

Color: colorless.

9.1.2.Odor: No data available.

9.1.3.Odor Threshold: No data available.

9.1.4.pH: No data available.

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- 9.1.5.Melting Point/freezing Point: No data available.
- 9.1.6.Initial Boiling Point and Boiling Range: No data available.
- 9.1.7.Flash Point: No data available.
- **9.1.8.Evaporation Rate:** No data available.
- 9.1.9.Flammability (Solid, Gas): No data available.
- 9.1.10. Upper/lower Flammability or Explosive Limits:

Upper explosion limit: No data available. Lower explosion limit: No data available.

- **9.1.11. Vapor Pressure:** No data available.
- **9.1.12. Vapor Density:** No data available.
- 9.1.13. Density: No data available.
- 9.1.14. Relative Density: No data available.
- 9.1.15. Solubility(ies): Water soluble.
- 9.1.16. Partition Coefficient: No data available.
- **9.1.17. Auto-ignition Temperature:** No data available.
- **9.1.18. Decomposition Temperature:** No data available.
- 9.1.19. Viscosity: No data available.
- 9.1.20. Explosive Properties: No data available.
- **9.1.21.Oxidizing Properties:** No data available.
- 9.2. Other Information: None.

SECTION 10. STABILITY AND REACTIVITY

- **10.1.** Reactivity: None anticipated.
- 10.2. Chemical Stability: Stable under recommended storage conditions.
- 10.3. Possibility of Hazardous Reactions: No hazardous reactions known if used for its intended purpose.
- 10.4. Conditions to Avoid: None known.
- **10.5.** Incompatible Materials: Strong oxidizing agents.
- 10.6. Hazardous Decomposition Products: Under fire conditions, carbon oxides, nitrogen oxides and sulfur oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

- 11.1. Information on Toxicological Effects:
 - **11.1.1.** Acute Toxicity Ingestion: Geneticin, LD50, 13 mg/kg (rat)
 - 11.1.2. Acute Toxicity Skin Contact: Not classified.
 - **11.1.3.** Acute Toxicity Inhalation: Geneticin, LD50, 2.220 mg/L (rat), Exposure time: 4 hr, Test atmosphere: dust/mist
 - **11.1.4. Skin Corrosion/irritation:** Irritating to skin.
 - 11.1.5. Serious Eye Damage Irritation: Risk of serious damage to eyes.
 - 11.1.6. Skin Sensitization Data: Not classified.
 - 11.1.7. Respiratory Sensitization Data: May be harmful.
 - **11.1.8. Germ Cell Mutagenicity:** Not classified.
 - 11.1.9. 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.
 - 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.

- 11.1.10. Reproductive Toxicity: Not classified.
- 11.1.11. Lactation: Not classified.
- 11.1.12. Specific Target Organ Toxicity Single Exposure: Not classified.
- 11.1.13. Specific Target Organ Toxicity Repeated Exposure: Not classified.
- 11.1.14. Aspiration Hazard: Not classified.
- 11.2. Additional Information: None.

SECTION 12. ECOLOGICAL INFORMATION

- 12.1. Ecotoxicity (Aquatic and Terrestrial, Where Available): No data available.
- **12.2.** Persistence and Degradation: No data available.
- **12.3.** Bioaccumulative potential: No data available.
- 12.4. Mobility in Soil: No data available.
- 12.5. Other Adverse Effects: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

- **13.1. Waste Treatment Methods:** Remove waste in accordance with local and/or national regulations. Offer surplus and non-recyclable solutions to a licensed disposal company.
- 13.2. To minimize exposure, refer to Section 8 (Exposure Controls/Personal Protection) of the SDS.

SECTION 14. TRANSPORT INFORMATION

- 14.1. UN Number: 2810
- 14.2. UN Proper Shipping Name: Toxic liquid, organic, n.o.s. (Hygromycin B Solution)
- 14.3. Transport Hazard Class(es): 6.1
 14.4. Packing Group, If Applicable: ||
- **3** 1, 11
- **14.5. Environmental Hazards:** Not classified as a marine pollutant.
- 14.6. Guidance on Transport in Bulk (According to Annex II of MARPOL 73/783 and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code (IBC Code)): None.
- 14.7. Other Special Precautions Related to Transport: None.

SECTION 15. REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations Specific for the Product in Question:

SARA 302/313 Components

SARA 302: This material is not subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute toxicity (any route of exposure), serious eye damage or irritation, respiratory or skin sensitization. Chronic health hazard.

California Prop. 65 Components

WARNING: This product can expose you to chemicals including Hygromycin B from Streptomyces hygroscopicus,

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which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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

This product does not contain HAPs.

WHMIS Hazard Class

D1A Very toxic materials D2A Very toxic materials D2B Toxic materials

SECTION 16. OTHER INFORMATION

16.1. Revision Date: 17 June 2020

16.2. Reason for Revision: Change in address of supplier.

16.3. Additional Information: None.

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