

## **Section 1 - Product and Company Information**

**Product Name:** HygroGold™ (solution), Hygromycin B

**Cat. Code:** ant-hg-1, ant-hg-5, ant-hm-1, ant-hm-5

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**Disclaimer:** All InvivoGen products are supplied for research and laboratory use only. Not for drug, household or other uses.

## **Section 2 – Hazards Identification**

### **Emergency Overview:**

#### **OSHA Hazards**

Highly toxic by inhalation, ingestion or skin absorption. Risk of serious damage to eyes. Respiratory sensitizer. Target organ effect.

Target organs: Ears.

#### **GHS classification**

Acute toxicity, Inhalation (Category 2)

Acute toxicity, Dermal (Category 2)

Acute toxicity, Oral (Category 2)

Serious eye damage (Category 1)

Respiratory sensitization (Category 1)

#### **GHS Label elements, including precautionary statements**

Pictogram



Signal word     Danger

Hazard statement

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.

Precautionary statements

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

P284 Wear respiratory protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water.

**HMIS Classification:** Health Hazard **3**, Chronic Health Hazard \* Flammability Hazard **0**, Reactivity Hazard **0**  
**NFPA Rating:** Health Hazard **3**, Fire **0**, Reactivity Hazard **0**

#### Potential Health Effects

- **Inhalation:** May be fatal if inhaled. May cause respiratory tract irritation.
- **Skin:** May be fatal if absorbed through the skin. May cause skin irritation.
- **Eye contact:** May cause eye irritation.
- **Ingestion:** May be fatal if swallowed.

### Section 3 – Composition/Information on Ingredient

**Substance name:** Hygromycin B  
**Formula:** C<sub>20</sub>H<sub>37</sub>N<sub>3</sub>O<sub>13</sub>, HCl  
**Molecular weight:** 527.52  
**CAS number:** 31282-04-9  
**EC number:** 250-545-5

### Section 4 – First Aid Measures

**General advice:** Consult a physician. Show this material safety data sheet to the doctor in attendance.  
**After skin contact:** Immediately wash skin with soap and plenty of water. Consult a physician.  
**After swallowing:** Never give anything by mouth to an unconscious person. Rinse mouth with water provided person is conscious. Consult a physician.  
**After inhalation:** Remove to fresh air. If not breathing give artificial respiration. Consult a physician.  
**After eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

### Section 5 – Fire Fighting Measures

**Suitable extinguishing media:** Water spray, carbon dioxide, dry chemical powder or appropriate foam.  
**Specific hazards arising from the chemical:** Hazardous decomposition products formed under fire conditions; carbon oxides, nitrogen oxides and hydrogen chloride gas.  
**Special Firefighting Procedures:** Wear self-contained breathing apparatus for fire fighting if necessary.

### Section 6 – Accidental Release Measures

**Personal precautions:** Wear protective equipment. Keep unprotected persons away. Avoid dust formation.  
**Method for Cleaning Up:** Sweep up and place in closed containers for disposal. Dispose contaminated material as waste according to section 13. Ventilate area and wash spill site after material clean-up is complete.

### Section 7– Handling and Storage

**Handling:** Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.  
**User Exposure:** Avoid inhalation. Use personal protective equipment (i.e. impermeable gloves, lab coat or apron).  
**Storage:** Keep tightly closed. Store at -20°C.

### Section 8 – Exposure Controls / PPE

#### **Personal protective equipment**

##### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection,

use a full-face supplied air respirator. 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**

Face shield and safety glasses 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**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Section 9 – Physical / Chemical Properties****Appearance**

Physical state: Liquid

Color: Yellow

**Safety Data**

Odor: No data available

Odor threshold: No data available

pH: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability: No data available

Upper/lower flammability or explosive limits: No data available

Vapor pressure: No data available

Relative density: No data available

Solubility: No data available

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

**Section 10 – Stability and Reactivity**

**Reactivity:** No data available

**Chemical stability:** Stable under recommended storage conditions

**Possibility of hazardous reactions:** No data available

**Conditions to avoid:** No data available

**Incompatible materials:** Strong oxidizing agents, strong bases

**Hazardous decomposition products:** No data available

**Section 11 – Toxicological Information****Acute toxicity:**

Oral LD50: 63 mg/kg rat, 13 mg/kg guinea pig

Inhalation LC50: No data available

Dermal LD50: No data available

Other information on acute toxicity: LD50 Intravenous: 6 mg/kg mouse

**Skin corrosion/irritation:** No data available  
**Serious eye damage/irritation:** No data available  
**Respiratory or skin sensitization:** No data available  
**Germ cell mutagenicity:** No data available  
**Carcinogenicity:** No data available  
**Reproductive toxicity:** No data available  
**Additional information:** RTECS: WK2130000

## **Section 12 – Ecological Information**

**Ecotoxicity:** No data available  
**Persistence and degradability:** No data available  
**Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available

## **Section 13 – Disposal Considerations**

**Product:** Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Must not be disposed of together with household garbage.  
**Contaminated Packaging:** Dispose of as unused product.

## **Section 14 – Transport Information**

**DOT (US):** Proper Shipping Name: Toxic, liquids, organic, n.o.s. UN#: 2810  
Class: 6.1 Packing Group: I Marine Pollutant: No Poison Inhalation Hazard: No  
**IATA:** UN#: 2810 Class: 6.1 Packing Group: I Proper Shipping Name: Toxic liquid, organic, n.o.s.  
Technical Name: Required  
**IMDG:** UN#: 2810 Class: 6.1 Packing Group: I Proper Shipping Name: Toxic liquid, organic, n.o.s.  
Marine Pollutant: No Severe Marine Pollutant: No Technical Name: Required.

## **Section 15 – Regulatory Information**

**OSHA Hazards** Highly toxic by inhalation, ingestion or skin absorption. Risk of serious damage to eyes. Respiratory sensitizer. Target organ effect.  
Target organs: Ears.

**SARA 302 Component:** None of the ingredients are listed.  
**SARA 313 Component:** None of the ingredients are listed.  
**SARA 311/312 Hazards:** Acute Health Hazard, Chronic Health Hazard.

### **U.S. State Regulations**

<b>Chemical Name</b>	<b>Massachusetts RTK</b>	<b>New Jersey RTK</b>	<b>Pennsylvania RTK</b>
Hygromycin B	-	X	X

**California Proposition 65:** This product does not contain chemicals listed under Proposition 65.

## **Section 16 – Other Information**

The information contained in this MSDS relates only to the material(s) designated and does not relate to use(s) in combination with any other material, process(es) and/or chemical reaction(s). InvivoGen provides this information in good faith and is based on our present knowledge. This MSDS is provided without warranty of any kind. The recipient is responsible for ensuring that, where applicable, existing laws and guidelines are observed.