

Safety Data Sheet


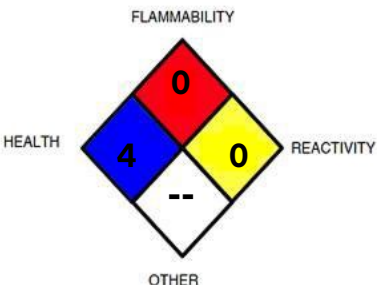
Section 1: Product & Company Identification

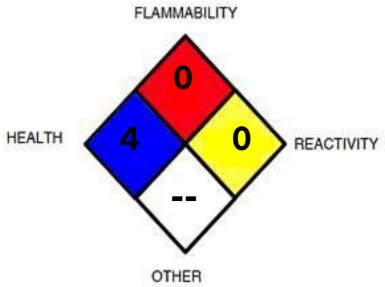
Product Name:	Hygromycin B in PBS
Product #:	H-1012-PBS
Synonyms:	Hygrovetine; Hygrovectine; D-streptamine
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

Section 2: Composition / Information on Ingredients

Component	CAS #	EC #	% Composition
Hygromycin B	31282-04-9	250-545-5	≥90
Phosphate Buffered Saline			

Section 3: Hazards Identification

Symbols	
HMIS Classification	<p>FLAMMABILITY</p> <p>HEALTH</p> <p>REACTIVITY</p> <p>OTHER</p> 

NFPA Classification	
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Section 4: First Aid Measures

General Overview:	Avoid contact, wear suitable protective clothing, gloves, and eye/face protection.
Inhalation:	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration, seek medical attention immediately.
Skin:	Wash immediately with water for 15 minutes. Remove contaminated clothing. Wash contaminated clothing before reuse. Seek medical attention immediately.
Eyes:	In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes. Remove contacts. Assure adequate flushing of the eyes by separating the eyelids with fingers. Seek medical attention immediately.
Ingestion:	If swallowed, DO NOT induce vomiting. Wash mouth with water, never give anything to an unconscious person. Seek medical attention immediately.
	See section 11 for more detailed information on health effects & symptoms.

SECTION 5: Fire Fighting Measures

Flammability of the product:	No data available
Extinguishing Media:	Dry chemical powder for SMALL FIRES and carbon dioxide, water spray, fog, or foam for LARGE FIRES. Do not use water jet.
Hazardous thermal (de)composition products:	Carbon oxides, Nitrogen oxides
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Be sure to use an approved/certified respirator or equivalent.
Flash Point:	No data available

Section 6: Accidental Release Measures





Personal Precautions:	Use personal protective equipment, splash goggles, gloves. Avoid dust formation
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Environmental Precautions:	Do not let product enter drains.
Methods for Clean-up:	Sweep up and shovel into suitable disposal container. Ventilate area and wash spill site after material pickup is complete.

SECTION 7: Handling & Storage

Storage:	Store at 2 - 8°C and protect from light. Keep container tightly closed in a cool, dry, and well-ventilated area.
Handling:	Use only in area provided with appropriate exhaust ventilation. Keep away from heat and source of ignition. Empty containers pose a fire risk. Evaporate residue under fume hood. Ground all equipment containing material. Do not breathe dust.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	 <p>If exposure limit is reached use ventilation system when handling or wear appropriate government (NIOSH/MSHA) approved respirator.</p>
Skin and Body:	  <p>Chemical-resistant gloves and lab coat/other protective clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.</p>
Eyes:	

	Safety goggles.
Ventilation/Engineering Measures:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	Contains no substances with occupational exposure limits.

SECTION 9: Physical and Chemical Properties

Appearance & Odor:	Clear and yellowish solution
Formula	$C_{20}H_{37}N_3O_{13}$
Molecular Wt.	527.5
Melting Pt.	No data available
Boiling Pt.	No data available
Density:	No data available
Vapor Pressure:	No data available
Evaporation Rate:	No data available
Vapor Density:	No data available
Solubility:	Water
Flash Point:	No data available
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Hazardous decomposition products:	Carbon oxides, Nitrogen oxides
Materials to Avoid:	Strong oxidizing agents, strong acids and bases
Conditions to avoid:	Fire, direct light

SECTION 11: Toxicological Information

RTECS#:	WK2130000
ACUTE Toxicity:	<p>VERY TOXIC</p> <p>LD50 Oral = 13 mg/kg (Rat)</p> <p>LD50 Inhalation = 2.22 mg/L (Rat) 4 h</p> <p>LD50 Intraperitoneal = 63 mg/kg (Rat)</p> <p>LD50 Intravenous = 6 mg/kg (Mouse)</p> <p>LD50 Intraperitoneal = 13 mg/kg (Guinea pig)</p> <p>LD100 Oral = 13 mg/kg (Rat)</p>

	<p>May be fatal if inhaled, swallowed, or absorbed through skin. Strong sensitizer. Causes severe eye irritation, lachrymator. Causes skin irritation.</p> <p>Material is irritating to mucous membranes and upper respiratory tract. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.</p> <p>Exposure can cause conjunctivitis, dermatitis.</p> <p>Target organs: mucous membranes, skin, eyes, sense organs and special senses (other olfaction effects)</p>
CHRONIC Toxicity:	N/A
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	<p>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.</p> <p>AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.</p> <p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>

SECTION 12: Ecological Information

Ecotoxicity:	No data available
Mobility:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Other adverse effects:	No data available
Corrosivity Characteristic:	No data available
General Notes:	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

SECTION 13: Disposal Considerations

Residue Waste or Unused product:	Only professional staff trained in such techniques must undertake waste disposal. Observe all appropriate federal, provincial, state, and local regulations.
Contaminated Packaging:	Do not reuse containers. Dispose of as unused product.

SECTION 14: Transportation Information

UN ID#:	UN2811
ADR / RID (LAND):	Toxic solid, organic, n.o.s. (Hygromycin B) Class 6.1 Packing II
DOT regulations:	Toxic solid, organic, n.o.s. (Hygromycin B) Class 6.1 Packing II
IMDG/IMO (SEA):	Toxic solid, organic, n.o.s. (Hygromycin B) Class 6.1 Packing II
IATA/DGR (AIR):	Toxic solid, organic, n.o.s. (Hygromycin B) Class 6.1 Packing II
Special Provisions:	N/A

SECTION 15: Regulatory Information

Health Phrases:	H300 Fatal if swallowed. H310 Fatal in contact with skin. H315 Causes skin irritation H318 Causes serious eye damage H330 Fatal if inhaled H335 May cause respiratory irritation
Risk Phrases:	P260 Do not breathe dust/fume/gas/mist/vapors/spray. P262 Do not get in eyes, on skin, or on clothing. P264 Wash skin thoroughly after handling P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P284 Wear respiratory protection
Safety Phrases:	P301 + P310 IF SWALLOWED: Call a POISON CENTER or doctor/physician. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician P321 Specific treatment (see. on this label). P330 Rinse mouth. P332 + P313 If skin irritation occurs: Get medical advice/attention.

	<p>P362 + P364 Take off contaminated clothing and wash before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant</p>
EU Regulations:	R26/27/28, R37/38, R41, S23, S26, S28, S36/37/39
US Regulations:	<p>TSCA: Not listed California Proposition 65: No products were found New Jersey State Right to Know: Listed Pennsylvania State Right to Know: Listed</p>
U.S. Federal Regulations:	<p>SARA 302/304 emergency planning and notification: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Acute Health Hazard, Chronic Health Hazard SARA 313 toxic chemicals notification and release reporting: No products were found.</p> <p>Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: Acute toxicity, oral (Cat. 2); Acute toxicity, inhalation (Cat. 1); Acute toxicity, dermal (Cat. 2); Serious eye damage (Cat. 1); Respiratory sensitization (Cat. 1)</p>
WHMIS (Canada):	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.

SECTION 16: Other Information

LIABILITY STATEMENT: *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*