



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.50

Section 1 - Product and Company Information

Product Name: Hygromycin B, From Streptomyces hygroscopicus
Product Number: H9773
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Fax: 800 325 5052
Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Table with 5 columns: Substance Name, CAS #, SARA 313, EC no, Annex I Index Number. Row 1: HYGROMYCIN B, 31282-04-9, No, 250-545-5.

Formula: C20H37N3O13
Synonyms: Anthelminticin, Hydromycin B, Hygromix 2.4, Hygromix-8, Hygromycin B, Hygrovetine

Section 3 - Hazards Identification

Emergency Overview: Highly Toxic (USA) Very Toxic (EU). Very toxic by inhalation, in contact with skin and if swallowed. Risk of serious damage to eyes. Lachrymator. Target organ(s): Ears.

HMIS Rating: Health: 4*, Flammability: 0, Reactivity: 0
NFPA Rating: Health: 4, Flammability: 0, Reactivity: 0

*additional chronic hazards present.
For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure: If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.
Inhalation Exposure: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A
Extinguishing Media: Suitable
Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.
Firefighting Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill: Evacuate area.
Procedure(s) of Personal Precaution(s): Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.
Methods for Cleaning Up: Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.
Storage: Suitable
Keep tightly closed. Store at 2-8°C

Section 8 - Exposure Controls / PPE

Engineering Controls: Safety shower and eye bath. Use only in a chemical fume hood.
Personal Protective Equipment:
Respiratory: Government approved respirator.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.

General Hygiene Measures

Wash contaminated clothing before reuse. Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance	Physical State	Color	Form
	Solid	Light beige	Powder

Molecular Weight: 527.5 AMU

pH	N/A
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	N/A

Flammability	N/A
Autoignition Temp	N/A
Solubility	N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable
Stable.
Materials to Avoid
Strong oxidizing agents.

Hazardous Decomposition Products**Hazardous Decomposition Products**

Thermal decomposition may produce carbon monoxide, carbon dioxide, and nitrogen oxides.

Hazardous Polymerization**Hazardous Polymerization**

Will not occur.

Section 11 - Toxicological Information**Route of Exposure****Skin Contact**

Causes skin irritation.

Skin Absorption

May be fatal if absorbed through skin.

Eye Contact

Causes severe eye irritation.

Inhalation

May be fatal if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be fatal if swallowed.

Sensitization**Respiratory**

May cause allergic respiratory reaction.

Skin

May cause allergic skin reaction.

Target Organ(s) or System(s)

Ears.

Signs and Symptoms of Exposure

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Exposure can cause: Conjunctivitis. Dermatitis. Repeated exposure can cause hearing loss.

RTECS Number: WK2130000

Toxicity Data

Inhalation - Rat: 2.22 mg/m³ (LC50)

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes.

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Conjunctive irritation.

Behavioral:Aggression.

Intraperitoneal - Rat: 63 MG/KG (LD50)

Oral - Mouse: 46000 UNITS/KG (LD50)

Intravenous - Mouse: 6 MG/KG (LD50)

Intraperitoneal - Guinea pig: 13 MG/KG (LD50)

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations**Appropriate Method of Disposal of Substance or Preparation**

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information**DOT**

Proper Shipping Name: Toxins, from living sources, solid, n.o.s.

UN#: 3172

Class: 6.1
Packing Group: Packing Group I
Hazard Label: Toxic substances.

IATA

Proper Shipping Name: Toxins, extracted from living sources, solid, n.o.s.
IATA UN Number: 3172
Hazard Class: 6.1
Packing Group: I
Not Allowed - Aircraft: Cargo aircraft only. Not permitted on passenger aircraft.

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: T+

Indication of Danger

Very toxic.

Risk Statements R: 26/27/28 41 42/43

Very toxic by inhalation, in contact with skin and if swallowed. Risk of serious damage to eyes. May cause sensitization by inhalation and skin contact.

Safety Statements S: 22 26 28 36/37/39 45

Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of polyethylene glycol in ethanol. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Classification and Label Text

Indication of Danger

Highly Toxic (USA) Very Toxic (EU).

Risk Statements

Very toxic by inhalation, in contact with skin and if swallowed. Risk of serious damage to eyes.

Safety Statements

Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Statements

Lachrymator. Target organ(s): Ears.

United States Regulatory Information

SARA Listed: No

United States - State Regulatory Information

California Prop - 65

This product is or contains chemical(s) known to the state of California to cause developmental toxicity.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.