

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Hygromycin B, 50 mg/mL Solution

Other means of identification

Product Code(s) K547
UN/ID no. 2810
Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended Use For Further Manufacturing Use Only.
Uses advised against Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

| | |
|-----------------------------|-----------------------------|
| Company Address | Manufacturer Address |
| VWR International, LLC | VWR Chemicals, LLC |
| Radnor Corporate Center | 28600 Fountain Parkway |
| 100 Matsonford Road | Solon, Ohio 44139 |
| Radnor, PA 19087-8660 | |
| Company Phone Number | 1-800-448-4442 |
| E-mail Address | info@amresco-inc.com |

Emergency Telephone Number

Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--------------------------------------|------------|
| Acute Toxicity - Oral | Category 3 |
| Acute Toxicity - Dermal | Category 3 |
| Acute toxicity - Inhalation (Vapors) | Category 3 |
| Serious Eye Damage/Eye Irritation | Category 1 |
| Respiratory Sensitization | Category 1 |

Label elements

Emergency Overview

Danger

Hazard statements

H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H318 - Causes serious eye damage
H331 - Toxic if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled



Appearance Brown

Physical State Solution

Odor No information available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
In case of inadequate ventilation wear respiratory protection
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see .? on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor
IF ON SKIN: Wash with plenty of water and soap
Call a POISON CENTER or doctor if you feel unwell
Take off immediately all contaminated clothing and wash it before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Rinse mouth

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not regulated

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | EC No. | Weight % | Trade Secret |
|--------------------------|------------|-----------|----------|----------------|
| Hygromycin B | 31282-04-9 | 250-545-5 | 5-10 | Not applicable |
| Sodium phosphate dibasic | 7558-79-4 | 231-448-7 | 0-0.5 | Not applicable |

4. FIRST AID MEASURES

First Aid Measures

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation Move to fresh air. If not breathing, give artificial respiration.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, CO₂, appropriate foam.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Hazardous Combustion Products Carbon oxides. Nitrogen oxides (NO_x).

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal protection Ensure adequate ventilation, especially in confined areas.

Environmental Precautions

Environmental Precautions See Section 12 for additional Ecological information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Absorb on sand or vermiculite and place in closed containers for disposal. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice. Protect from light and moisture.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from light.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------------------------------|-----------|----------|------------|
| Hygromycin B 31282-04-9 | - | - | - |
| Sodium phosphate dibasic 7558-79-4 | - | - | - |

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes. Safety glasses with side-shields.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical State | Solution | Odor | No information available |
| Appearance | Brown | Odor Threshold | No information available |
| Color | No information available | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------------------|--------------------------|-------------------------|
| pH | No information available | |
| Melting point/freezing point | No information available | |
| Boiling Point/Range | No information available | |
| Flash Point (High in °C) | No information available | |
| Evaporation Rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |
| Vapor pressure | No information available | |
| Vapor Density | No information available | |
| Specific Gravity | No information available | |
| Water Solubility | No information available | |
| Solubility in other solvents | No information available | |
| Partition coefficient | No information available | |
| Autoignition Temperature | No information available | |
| Decomposition Temperature | No information available | |
| Kinematic viscosity | No information available | |

Dynamic viscosity No information available
Explosive Properties No information available
Oxidizing Properties No information available

Other Information

Softening Point No information available
Molecular Weight No information available
VOC Content No information available
Density No information available
Bulk Density No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Protect from light.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Toxic by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye Contact May cause irreversible damage to eyes.
Skin Contact Toxic in contact with skin.
Ingestion Toxic if swallowed.

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------------------------|--------------------|-------------|--------------------------------------|
| Hygromycin B 31282-04-9 | = 13 mg/kg (Rat) | - | = 2220 µg/m ³ (Rat) 4 h |
| Sodium phosphate dibasic 7558-79-4 | = 17 g/kg (Rat) | - | - |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity No information available.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|----------------------------|-------|------|-----|------|
| Hygromycin B 31282-04-9 | - | - | - | - |

| | | | | |
|---------------------------------------|---|---|---|---|
| Sodium phosphate dibasic 7558-79-4 | - | - | - | - |
|---------------------------------------|---|---|---|---|

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic Toxicity Suspected teratogen. Possible mutagen.
Target Organ Effects Eyes, Ears, Reproductive system.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

6.13% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Toxicity to Fish | Crustacea |
|---------------------------------------|----------------------|------------------|-----------|
| Hygromycin B 31282-04-9 | - | - | - |
| Sodium phosphate dibasic 7558-79-4 | - | - | - |

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

| Chemical Name | Partition coefficient |
|---------------------------------------|-----------------------|
| Hygromycin B 31282-04-9 | - |
| Sodium phosphate dibasic 7558-79-4 | - |

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging

Do not re-use empty containers.

| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---------------------------------------|------|--------------------------|------------------------|------------------------|
| Hygromycin B 31282-04-9 | - | - | - | - |
| Sodium phosphate dibasic 7558-79-4 | - | - | - | - |

| Chemical Name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|---------------------------------------|--------------------------------------|------------------------|------------------------|------------------------|
| Hygromycin B 31282-04-9 | - | - | - | - |
| Sodium phosphate dibasic 7558-79-4 | - | - | - | - |

| Chemical Name | California Hazardous Waste Status |
|----------------------------|-----------------------------------|
| Hygromycin B 31282-04-9 | - |
| Sodium phosphate dibasic | - |

| | |
|-----------|--|
| 7558-79-4 | |
|-----------|--|

14. TRANSPORT INFORMATION

DOT

UN/ID no. 2810
Proper shipping name TOXIC, LIQUIDS, ORGANIC, N.O.S. (CONTAINS HYGROMYCIN B)
Hazard Class 6.1
Packing Group II

IATA

UN/ID no. 2810
Proper shipping name TOXIC, LIQUIDS, ORGANIC, N.O.S. (CONTAINS HYGROMYCIN B)
Hazard Class 6.1
Packing Group II

15. REGULATORY INFORMATION

International Inventories

TSCA Does not comply
DSL/NDSL Does not comply
EINECS/ELINCS Complies
ENCS Does not Comply
IECSC Complies
KECL Does not Comply
PICCS Does not Comply
AICS Does not Comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Component | SARA 313 - Threshold Values % |
|---|-------------------------------|
| Hygromycin B 31282-04-9 (5-10) | - |
| Sodium phosphate dibasic 7558-79-4 (0-0.5) | - |

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Hygromycin B 31282-04-9 | - | - | - | - |
| Sodium phosphate dibasic 7558-79-4 | 5000 lb | - | - | X |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|---------------------------------------|--------------------------|------------------------------------|--|
| Hygromycin B 31282-04-9 | - | - | - |
| Sodium phosphate dibasic 7558-79-4 | 5000 lb | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

| Chemical Name | California Prop. 65 |
|--------------------------------------|---------------------|
| Hygromycin B - 31282-04-9 | - |
| Sodium phosphate dibasic - 7558-79-4 | - |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------------|------------|---------------|--------------|
| Hygromycin B 31282-04-9 | - | - | - |
| Sodium phosphate dibasic 7558-79-4 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

Issuing Date 08-Jun-2010

Revision Date 17-Feb-2016

Revision Note

No information available

Disclaimer

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. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet