

Material Safety Data Sheet

PRODUCT: **Hygromycin B Solution**

PRODUCT USAGE: This product is supplied with the intention that it is for laboratory research use only. It must not, under any circumstances, be used for human, drug, food, cosmetic, agricultural, domestic or any other use. This product must only be handled and used by suitably qualified personnel in an appropriately equipped laboratory.

CHEMICAL IDENTIFICATION: O-6-Amino-6-deoxy-L-glycero-D-galacto-heptopyranosylidene-(1→2-3)-O-β-D-talopyranosyl-(1→5)-2-deoxy-N3-methyl-D-streptamine, CAS [31282-04-9], EC NO. 250-545-5

Synonyms: Antihelmycin, Hydromycin B, Hygromix 2.4, Hygromix-8, Hygromycin /b, Hygrovetine.

HAZARDS IDENTIFICATION: Label Precautionary Statements
Highly toxic (USA)
Very Toxic (EU)
Very Toxic by Inhalation, In contact with skin and if swallowed.
Irritating to respiratory system and skin.
Risk of serious damage to eyes.
California Prop. 65 Reproductive Hazard.
Strong Sensitizer
Lachrymator
Target Organ(s): Ears
In case of accident or if you feel unwell, seek medical advice immediately, show the label when possible.
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.
Do not breathe vapor.

FIRST-AID MEASURES:

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes. Remove contaminated clothing. Assure adequate flushing of the eyes by separating the eyelids with fingers. If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. Wash contaminated clothing before reuse.

FIRE AND EXPLOSION HAZARD DATA:

Flash Point: Non-flammable

Unusual Fire and Explosion Hazards: Emits Toxic Fumes under Fire Condition.

Extinguishing Media: Carbon Dioxide, Dry Chemical Powder or Appropriate Foam.

Special fire fighting procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

ACCIDENTAL RELEASE MEASURES:

Evacuate area.

Wear Self-contained breathing apparatus, rubber boots and heavy rubber gloves.

Absorb with sand or vermiculite and place in closed containers for disposal.

Ventilate area and wash spill site after material pickup is complete.

EXPOSURE CONTROLS / PERSONAL PROTECTION:

Wear appropriate NIOSH / MSHA-approved respirator, chemical-resistant gloves, safety goggles, and other protective clothing.

Use only in a chemical fume hood.

Safety shower and eye bath.

Do not breathe vapor.

Do not get in eyes, on skin, on clothing.

Avoid prolonged or repeated exposure.

Wash thoroughly after handling.

EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED:

Highly Toxic.

Strong sensitizer.

Severe eye irritant.

Lachrymator.

Keep tightly closed.



Store in a cool dry place.

**PHYSICAL &
CHEMICAL
PROPERTIES:**

Solution, dec. 160-180°C.

**STABILITY &
REACTIVITY:**

Stable

Hazardous combustion or decomposition products. Thermal decomposition may produce Carbon Monoxide, Carbon Dioxide, and Nitrogen Oxides. Hazardous polymerization will not occur.

**TOXICOLOGICAL
INFORMATION:**

Acute Effects:

May be fatal if inhaled, swallowed, or absorbed through skin.

Causes severe eye irritation.

Causes skin irritation.

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.

Strong sensitizer.

Exposure can cause: Conjunctivitis, Dermatitis,

**TOXICOLOGICAL
INFORMATION
CONTINUED:**

Chronic Effects:

Repeated exposure can cause hearing loss.

Target Organ(s): Ear

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

RTECS #: WK2130000, O-6-Amino-6-deoxy-L-glycero-D-galactohexopyranosylidene-(1→2-3)-O-β-D-talopyranosyl-(1→5)-2-deoxy-N-3-methyl-D-streptomycin

Toxicity Data:

IHL-RAT LC50:2220 UG/M3/4H	GISAAA 38(5),11, 1973
IPR-RAT LC50:63 MG/KG	GISAAA 38(5), 11, 1973
ORL-MUS LD50:46000 Units/KG	PCJOAU 1, 396, 1967
IVN-MUS LD50: 6 MG/KG	85GDA2 1,202, 1980
IPR-GPG LD50:13 MG/KG	GISAAA 38(5),11, 1973

Target Organ Data:

Sense Organs and special senses (other olfaction effects)
Sense Organs and special senses (Conjunctiva irritation)
Behavioral (aggression)

Additional Information:

ORL-RAT LD100: 13 MG/KG
Only selected registry of toxic effects of chemical substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

ECOLOGICAL INFORMATION:

Data not yet available.

DISPOSAL CONSIDERATIONS :

Only professional staff trained in such techniques must undertake waste disposal. Observe all appropriate federal, provincial or state and local regulations. The material for disposal should be mixed with, or dissolved in, a combustible solvent and burnt in a chemical incinerator equipped with an afterburner and scrubber.

REGULATORY INFORMATION:

European Information:

Very Toxic
R 26/27/28
Very Toxic by inhalation, In contact with skin and if swallowed.
R 37/38
Irritating to respiratory system and skin.
R 41
Risk of serious damage to eyes.
S 45

European Information continued:

In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

S 26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39

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

S 23

Do not breathe vapor.

Review, Standards, and Regulations

OEL=MAK

OEL-Russia: STEL 0.001 MG/M3; Skin Jan 1993

NOHS 1974: HZD M2770; NIS 1; TNF 71; NOS 1; TNE 357

U.S. Information

California Proposition 65: This product is or contains chemical(s) known to the state of California to cause developmental toxicity.

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. A.G. Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. A.G. Scientific products are for research purposes only. Not for human use or consumption.