

SAFETY DATE SHEET

Luminol/Enhancer Solutions

CTG-AB0001-A	The Celltechgen™ Hygromycin B,1g	ISSUE DATE July 9, 2019
CTG-AB0001-B	The Celltechgen [™] Hygromycin B,5g	ISSUE DATE July 9, 2019

Section 1. Identification

GHS product identifier	: Hygromycin B
Product code	: CTG-AB0002
Relevant identified uses of the substance or mixture and uses advised against	
Identified uses	Reagent for development and research. For additional information on uses please refer to
	"www.celltechgen.com"

Supplier's details

Celltechgen LLC 14780 Memorial Drive, Suite 210,Houston, TX 77079,United States Toll-free: 1-877-994-4100 www.celltechgen.com Email: info@celltechgen.com **Emergency telephone:** 1-877-994-4100

Section 2. Hazards identification.

Classification of the substance or mixture

This mixture is not classified as dangerous according to European Union legislation.

Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Other hazards

None known.

Section 3. Composition/information on ingredients

Chemical nature	Aqueous solution of inorganic and organic compounds.
Substance	Not aplicable
Mixture	
Remarks	No disclosure requirement according to Regulation (EC) No.1907/2006.
Mixture	•

Section 4. First aid measures

Description of first aid measures

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

After eye contact: rinse out with plenty of water. Remove contact lenses.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Most important symptoms and effects, both acute and delayed

Allergic reactions

Indication of any immediate medical attention and special treatment needed

No information available.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. Special hazards arising from the substance or mixture Not combustible. Ambient fire may liberate hazardous vapours. Advice for firefighters Special protective equipment for firefighters In the event of fire, wear self-contained breathing apparatus. Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency	Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate	
personnel:	ventilation. Evacuate the danger area, observe emergency procedures, consult an	
	expert.	
Advice for emergency responders:	Protective equipment see section 8.	
Environmental precautions	Do not let product enter drains.	
Methods and materials for	Cover drains. Collect, bind, and pump off spills. Observe possible material	
containment and cleaning up	restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up	
	affected area. Avoid generation of dusts.	
Reference to other sections	Indications about waste treatment see section 13.	

Section 7. Handling and storage

Precautions for safe handling

Advice on safe handling
Observe label precautions.
Hygiene measures
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Conditions for safe storage, including any incompatibilities

Tightly closed.

Recommended storage temperature see product label.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8. Exposure controls/personal protection

Exposure control

Engineering measure

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.See section 7.1

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection:	Safety glasses
Hand protection:full contact	Glove material: Nitrile rubber
	Glove thickness: 0.2mm
	Break through time: > 480 min
Hand protection:splash contact	Glove material: Nitrile rubber
	Glove thickness: 0.2 mm
	Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 743Dermatril® L(full contact), KCL 743 Dermatril® L (splash contact). This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves

Other protective equipment protective clothing

Respiratory protection

required when vapours/aerosols are generated.

Recommended Filter type: filter ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not let product enter drains

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Form	Liquid
Colour	Clear
Odour	No strong odour known
Odour Threshold	No information available.
pH	No information available.
Melting point	No information available.

Boiling point No information available. Not applicable Flash point No information available. Evaporation rate Flammability (solid, gas) No information available. Lower explosion limit No information available. Upper explosion limit No information available. No information available. Vapour pressure Relative vapour density No information available. No information available. Density At 20 °C soluble Water solubility Partition coefficient: n-octanol/water No information available. No information available. Auto-ignition temperature Decomposition temperature No information available. No information available. Viscosity, dynamic Explosive properties No information available. Oxidizing properties none

Section 10. Stability and reactivity

ReactivitySee section 10.3.Chemical stabilityThe product is chemically stable under standard ambient conditions (room temperature) .Possibility of hazardous reactionsViolent reactions possible with:The generally known reaction partners of water.Conditions to avoidno information availableIncompatible materialsno information availableHazardous decomposition productsIn the event of fire:See section5.

Section 11. Toxicological information

Information on toxicological effects Acute oral toxicity This information is not available. This information is not available. Acute inhalation toxicity This information is not available. Acute dermal toxicity This information is not available. Skin irritation **Eve irritation** This information is not available. Sensitisation Mixture may cause an allergic skin reaction. May cause an allergic skin reaction. Germ cell mutagenicity This information is not available. Carcinogenicity This information is not available.

Reproductive toxicity	This information is not available.
Teratogenicity	This information is not available.
Specific target organ toxicity - single exposure	This information is not available.
Specific target organ toxicity - repeated exposure	This information is not available.
Aspiration hazard	This information is not available.
Further information	
Handle in accordance with good industrial hygiene and safety practice.	
Other dangerous properties can not be excluded.	
Components	
$O-2-amino-2, 7-dideoxy-D-glycero-\alphaD-gluco-heptopyranosyl-(1 \rightarrow 4)-O-[3-deoxy-4-C-methyl-3-(methylamino)-2, 7-dideoxy-2, 7-dideoxy-2,$	
β -L-arabinopyranosyl- $(1\rightarrow 6)$]-2-deoxy-D-streptamine sulfate (1:2) (salt)	
Acute oral toxicity	

LD50 Rat: > 5.000 mg/kg

(RTECS) (in analogy to similar products)

Section 12. Ecological information

Toxicity

No information available Persistence and degradability No information available Bioaccumulative potential No information is available Mobility in soil No information available. Results of PBT and vPvB assessment Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation(EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted. Other adverse effects Discharge into the environment must be avoided.

Section 13.Disposal considerations

Please follow the regulations of different countries

Section 14. Transport information

Land transport (ADR/RID) 14.1 - 14.6	Not classified as dangerous in the meaning of transport regulations.
Inland waterway transport (ADN)	Not relevant
Air transport (IATA) 14.1 - 14.6	Not classified as dangerous in the meaning of transport regulations.
Sea transport (IMDG) 14.1 - 14.6	Not classified as dangerous in the meaning of transport regulations.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	
Not relevant	

Section 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations Major Accident Hazard Legislation Occupational restrictions

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29April 2004 on persistent organic pollutants and amending Directive 79/117/EEC Substances of very high concern (SVHC):

SEVESO III

Not applicable Take note of Dir 94/33/EC on the protection of young people at work. Not regulated Not regulated

This product does not contain substances of very high concern according to Regulation (EC) No1907/2006(REACH), Article 57 above the respective regulatory concentration limit of $\ge 0.1 \%$ (w/w). 10-13

National legislation Storage class

Chemical safety assessment

For this product a chemical safety assessment was not carried out.

Section 16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H317	May cause an allergic skin reaction.
Training advice	Provide adequate information, instruction and training for operators.
Labelling	
Hazard pictograms	
Signal word	Warning
Hazard statements	H317 May cause an allergic skin reaction.
Precautionary statements	Prevention
Response	P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
Regional representation	This information is given on the authorised Safety Data Sheet for your country.

Training advice

Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.celltechgen.com.

Regional representation

This information is given on the authorised Safety Data Sheet for your country.

End of the safety date sheets