

Effective date: 04/10/2026	Hy-Labs Cat. No: TT170	MSDS FORMAT	
Doc. No: MSDS- TT170		MATERIAL SAFETY DATA SHEET	Replace Doc: NA

1- Product and Company Identification

Product Name	BRAIN HEART INFUSION BROTH + GLYCEROL
Reference number	TT170
Identified uses	Prepared microbiological culture medium in tube format for laboratory cultivation of microorganisms. For in-vitro laboratory use only. Not for human or animal consumption.
Manufacturer	Hy-Laboratories Ltd. Park Tamar, Rehovot, 76326, Israel Tel: 972-8-9366475 Fax: 972-8-9366474

2- HAZARDS IDENTIFICATION

GHS Classification (Regulation (EC) No 1272/2008 / GHS): The finished, prepared product (a liquid, water-based broth) is not classified as a hazardous mixture under GHS/CLP.

Label elements: No signal word, hazard pictogram, or hazard statement required for the finished product.

Other hazards: None known. Both raw materials (BHI broth base, glycerol) are common, low-hazard laboratory reagents even in concentrated/undiluted form.

Biological hazard: Once inoculated with a microbial culture, tubes should be handled under standard microbiological biosafety practice appropriate to the organism being grown/stored.

3- COMPOSITION/INFORMATION ON INGREDIENTS

This product is a liquid (broth) enriched culture/cryopreservation medium in tubes, prepared from the following components:

1) Brain Heart Infusion (BHI) Broth

Description: Complex mixture (brain-heart infusion, peptones, glucose, sodium chloride, disodium phosphate)
Concentration: 37 g/L
Classification: Not classified as hazardous (GHS/CLP)

2) Glycerol

CAS No.: 56-81-5
Description: Cryoprotectant
Concentration: 150 mL/L (15% v/v)
Classification: Not classified as hazardous (GHS/CLP), even in concentrated/undiluted form.

3) Water (purified/deionized) - solvent/diluent, balance to volume

4- First Aid Measures

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists (unlikely with this product).

Skin contact: Wash thoroughly with soap and water. Not expected to cause irritation under normal use.

Inhalation: Not an expected route of exposure for a liquid broth. If mist is inhaled and irritation occurs (unlikely), remove to fresh air. Seek medical advice if symptoms persist.

Ingestion: Rinse mouth with water. Not expected to be harmful in small amounts; seek medical advice if a large quantity is swallowed or discomfort occurs.

Note to physician: Treat symptomatically. No specific antidote required; both components are common, low-hazard laboratory/food-grade materials.

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For inoculated tubes, inform medical personnel of possible biological exposure.

5- Fire Fighting Measures

The finished, prepared product is an aqueous liquid broth and is not flammable or combustible under normal conditions.

Suitable extinguishing media: Use extinguishing media appropriate to the surrounding fire (water spray/fog, CO2, dry chemical, foam).

Unsuitable extinguishing media: None known.

Specific hazards: None known. Note that concentrated/undiluted glycerol has a high flash point (approx. 160°C) and is not readily flammable, but can burn if involved in a fire with other combustible materials.

Special protective equipment for firefighters: Use self-contained breathing apparatus and full protective equipment for fires involving surrounding materials.

6- Accidental Release Measures

Personal precautions: Ensure adequate ventilation. Avoid unnecessary contact with eyes, skin, and mucous membranes. Wear standard laboratory PPE (gloves, lab coat, eye protection). If the tube has been inoculated, treat as a biohazard.

Environmental precautions: Prevent large spills from entering drains, waterways, or soil (not expected to be environmentally harmful at the concentrations present).

Methods for containment and cleanup: Wearing appropriate PPE, absorb spilled liquid with paper towel or other absorbent material, collect in a suitable container, and rinse the area with water. Treat inoculated material as potentially biohazardous. Disinfect the area if the tube had been inoculated.

7- Handling and Storage

Handling: Handle using standard microbiological/good laboratory practice. Avoid splashes, aerosols and avoid contact with eyes, skin, and mucous membranes. Do not ingest. Wash hands after handling.

Storage: Store prepared tubes tightly closed, in their original packaging, as indicated on the product label/certificate of analysis. Unopened/sterile tubes are typically stored at 2-25°C (per label) until the labeled expiry date; protect from excessive heat, freezing and contamination. Glycerol-containing broth stocks intended for long-term cryopreservation of cultures are typically frozen at -20°C or -80°C after inoculation, per your laboratory's protocol. Protect from contamination.

8- Exposure Controls, Personal Protection

Occupational exposure limits: No specific occupational exposure limits (OEL/TLV) have been established for this finished product.

Engineering controls: No special ventilation is required for normal handling of this liquid broth; use in a well-ventilated area. Use of a biological safety cabinet is recommended when inoculating tubes with unknown or pathogenic cultures, per your laboratory's risk assessment.

Personal protective equipment:

- Eye protection:** Safety glasses recommended.
- Skin protection:** Laboratory coat and gloves recommended as good laboratory practice.
- Respiratory protection:** Not normally required under conditions of normal use.

Avoid generation of aerosols.

Handle inoculated tubes according to applicable biosafety procedures.

9- Physical and Chemical Properties

Appearance: Clear to slightly opalescent, pale yellow to amber liquid (broth)

Odor: Faint characteristic odor

pH: Approx. 7.1 – 7.5

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Freezing point: Depressed relative to plain water due to glycerol content (typically well below 0°C at 15% v/v glycerol), allowing use as a cryopreservation medium

Boiling point: Approx. 100°C (aqueous solution)

Flash point: Not applicable (aqueous solution; not a flammable liquid)

Solubility: Fully miscible with water

Density (relative): Slightly greater than 1.0 g/mL due to glycerol content (approx. 1.03-1.04 g/mL, typical)

10- Stability and Reactivity

Chemical stability: Stable under normal conditions of storage and use. Sterility should be maintained until use; avoid repeated freeze-thaw cycles if used for culture cryopreservation, as this may affect viability of stored organisms (not a chemical safety concern).

Possibility of hazardous reactions: None known under normal use.

Conditions to avoid: Contamination, excessive heat, and prolonged exposure to light during storage.

Incompatible materials: Strong oxidizing agents (relevant to concentrated glycerol in bulk industrial contexts; not applicable to this dilute, aqueous laboratory medium under normal use).

Hazardous decomposition products: None expected under normal conditions of use and storage.

11- Toxicological Information

Acute toxicity: The components are common, low-hazard laboratory/food-grade materials. Glycerol has very low acute toxicity (oral LD50, rat, > 12,000 mg/kg); BHI broth base is not classified as hazardous.

Skin corrosion/irritation: Not expected to be irritating under normal use.

Serious eye damage/irritation: Not expected to be irritating under normal use.

Sensitization: Not known to be a skin or respiratory sensitizer.

Other information: No chronic health effects known from normal laboratory use of this product.

Avoid ingestion, eye contact and prolonged skin contact. Inoculated tubes may present biological hazards.

12- Ecological Information

Ecotoxicity: Not expected to be harmful to aquatic organisms at the concentrations present; both components are common, readily biodegradable, low-hazard substances. Prevent release to drains or the environment and avoid uncontrolled disposal.

Persistence and degradability: Glycerol and the organic nutrient components are readily biodegradable.

Bioaccumulative potential: Not expected to bioaccumulate.

Other adverse effects: Dispose of used/inoculated media appropriately (see Section 13) to avoid release of cultured microorganisms into the environment.

13- Disposal Information

If inoculated with a microbial culture, dispose of in accordance with your institution's biosafety procedures (e.g., autoclaving) and applicable local, national, and international regulations.

Unused/unopened product may typically be disposed of as general laboratory waste or down the drain with plenty of water, in accordance with local wastewater regulations (glycerol and BHI broth components are readily biodegradable).

Dispose of contents/container in accordance with applicable local, national, and international regulations.

14- Transport Information

Not classified as a dangerous good for transport by road (ADR), rail (RID), sea (IMDG), or air (IATA/ICAO).

UN Number: Not applicable

UN Proper Shipping Name: Not applicable

Transport Hazard Class(es): Not applicable

Packing Group: Not applicable

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Environmental hazards: No

Special precautions: Protect tubes from damage, leakage, excessive heat and freezing. If shipping tubes inoculated with cultured microorganisms, applicable biological/infectious substance transport regulations (e.g., UN3373 Biological Substance, Category B, where relevant) may apply - assess based on the specific organism(s) present.

15- Regulatory Information

This product is not classified as hazardous under Regulation (EC) No 1272/2008 (CLP) / GHS.

Both components (BHI broth base, glycerol) are common, low-hazard laboratory/food-grade materials and are generally listed on major chemical inventories (e.g., TSCA, EINECS).

For In-Vitro Diagnostic (IVD)/laboratory use only - ensure compliance with applicable local IVD and biosafety regulatory requirements in addition to this chemical safety data sheet.

Users are responsible for determining any additional applicable regulations for their jurisdiction and intended use.

This document is prepared for the final prepared product. Classification and labelling requirements may vary by jurisdiction and intended use. Users are responsible for compliance with applicable requirements. This sheet addresses the final product only and does not replace supplier SDSs for individual raw materials.

16- Other Information

For In-Vitro use only.

Disclaimer

The information contained in this Safety Data Sheet is believed to be accurate based on the current knowledge of the product and its components. It is intended solely as guidance for the safe handling, storage, use, transport, and disposal of the product and should not be considered a warranty or quality specification. Users are responsible for ensuring compliance with applicable local, national, and international regulations.