

Effective date: 30/09/2026	Hy-Labs Cat. No: PD074	MSDS FORMAT	
Doc. No: MSDS- PD074		MATERIAL SAFETY DATA SHEET	Replace Doc: NA

1- Product and Company Identification

Product Name	HY LEGIONELLA MEDIUM SELECTIVE BCYE
Reference number	PD074
Identified uses	Selective enriched culture medium (agar plates) for the isolation of Legionella species from clinical, water, or environmental samples. For In-Vitro Diagnostic (IVD) 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 agar plate (a solid, water-based gel) is not classified as a hazardous mixture under GHS/CLP - all selective supplement components are present at trace concentrations, well below standard GHS mixture-classification cut-offs (see Section 3 for details and important cautions).

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

IMPORTANT – The product contains antimicrobial agents, including cycloheximide, polymyxin B and vancomycin. Concentrated raw materials may have additional hazards.

Cycloheximide (Actidione): This medium is manufactured using cycloheximide, a raw material classified as Danger - Acute Tox. 2 (H300, Fatal if swallowed), Muta. 2 (H341, suspected of causing genetic defects), Repr. 1B (H360D, may damage the unborn child), and Aquatic Chronic 2 (H411). This is a significantly more severe hazard class than other supplements used across this product line. Although the finished plate's cycloheximide content (approx. 80 mg/L, 0.008% w/v) is calculated to fall below standard GHS generic mixture-classification cut-offs, this substance's acute lethality and reproductive/genotoxic hazard warrant special handling care during manufacturing and explicit review by your EHS/regulatory function - do not rely on dilution alone without that review.

Other antimicrobial supplements: Vancomycin and polymyxin B are also present (as prepared solutions); these are respiratory/skin sensitizers or acute-toxicity-classified in concentrate, but are used at low mg/L levels.

Biological hazard: Once inoculated with a clinical, water, or environmental sample, plates must be treated as a biohazard and handled under appropriate biosafety containment (Biosafety Level 2 or 3 per local requirements, given the pathogenicity and potential aerosol transmissibility of Legionella).

3- COMPOSITION/INFORMATION ON INGREDIENTS

This product is a solid (agar) selective enriched culture medium in plates, prepared from the following components:

1) Legionella BCYE Agar Base

Description: Complex mixture (yeast extract, ACES-buffered base, alpha-ketoglutarate, agar; typically supplied without activated charcoal/L-cysteine/ACES, which are added separately per this formulation)

Concentration: 30.75 g/L

Classification: Not classified as hazardous (GHS/CLP)

2) ACES Buffer (N-(2-Acetamido)-2-aminoethanesulfonic acid)

CAS No.: 7365-82-4

Concentration: 4 g/L

Classification: Generally not classified as hazardous; some suppliers note mild eye/skin irritation potential in concentrated powder form.

3) Cycloheximide (Actidione)

Effective date: 30/09/2026	Hy-Labs Cat. No: PD074	MSDS FORMAT	
Doc. No: MSDS- PD074		MATERIAL SAFETY DATA SHEET	Replace Doc: NA

CAS No.: 66-81-9

Concentration: 0.08 g/L (80 mg/L, approx. 0.008% w/v)

Classification (**concentrate**): DANGER - Acute Tox. 2 (H300 - Fatal if swallowed), Muta. 2 (H341 - Suspected of causing genetic defects), Repr. 1B (H360D - May damage the unborn child), Aquatic Chronic 2 (H411 - Toxic to aquatic life with long lasting effects).

Note: This is the most severely hazardous raw material used in this product. At 0.008% w/v the finished-product **concentration is calculated to be well below standard GHS generic concentration cut-offs** (typically 1% for Acute Tox. 2/Muta. 2/Aquatic Chronic 2, and 0.3% for Repr. 1B) for mixture classification, but given the severity class (fatal if swallowed; reproductive/genotoxic hazard), this raw material warrants explicit EHS/regulatory sign-off rather than reliance on dilution math alone.

4) L-Cysteine Hydrochloride, Anhydrous

CAS No.: 52-89-1

Concentration: 0.4 g/L

Classification: Generally low-hazard; some suppliers note mild skin/eye irritation potential in concentrated powder form.

5) Activated Charcoal

CAS No.: 7440-44-0

Concentration: 0.5 g/L

Classification: Not classified as hazardous; combustible dust in concentrated powder form (dust explosion precautions apply to bulk powder handling, not to the finished plate).

6) Glycine

CAS No.: 56-40-6

Concentration: 3 g/L

Classification: Not classified as hazardous.

7) Polymyxin B Sulfate Solution, 2 mg/mL, prepared from Polymyxin B Sulfate

CAS No.: 1405-20-5

Classification (**concentrate**): Warning - Acute Tox. 4, Oral (H302 - Harmful if swallowed)

Added: 6.68 mL/L -> Final concentration in agar: approx. 13.36 mg/L polymyxin B sulfate (approx. 0.00134% w/v).

8) Vancomycin Hydrochloride Solution, 1 mg/mL, prepared from Vancomycin -

CAS No.: 1404-93-9

Classification (**concentrate**): Danger - Resp. Sens. 1 (H334), Skin Sens. 1 (H317)

Added: 1 mL/L -> Final concentration in agar: approx. 1 mg/L (0.0001% w/v)

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

Note: All raw-material contributions other than cycloheximide are far below standard GHS generic concentration cut-offs for classification of the finished mixture. Cycloheximide is also calculated to be below its cut-offs but is flagged above for special review given its severity class.

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.

Skin contact: Wash with plenty of water and soap. If irritation, rash, or an allergic reaction develops (possible with vancomycin or polymyxin B exposure). Remove contaminated clothing. Seek medical attention.

Inhalation: Not an expected route of exposure for a solid agar medium. Move to fresh air if irritation or discomfort

Effective date: 30/09/2026	Hy-Labs Cat. No: PD074	MSDS FORMAT	
Doc. No: MSDS- PD074		MATERIAL SAFETY DATA SHEET	

occurs. Seek medical advice if symptoms persist.

Ingestion: Rinse mouth with water. Do not induce vomiting. Seek medical advice if discomfort occurs or a significant amount of the finished product is swallowed. Seek medical advice if unwell.

Note to physician: Treat symptomatically. If the plate has been inoculated with a clinical/environmental sample, also consider the risk of Legionella exposure, inform medical personnel of possible biological exposure.

5- Fire Fighting Measures

The finished, prepared product is a solid agar medium and is not flammable or readily 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 for the finished product. Activated charcoal and other dehydrated powders are combustible dusts; avoid generating dust clouds near ignition sources during manufacturing. Burning packaging or decomposition may generate irritating fumes.

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 contact with eyes, skin, and mucous membranes. Wear standard laboratory PPE (gloves, lab coat, eye protection). If the plate has been inoculated, treat as a biohazard.

Environmental precautions: Prevent spilled material, and especially any cycloheximide-containing waste, from entering drains, waterways, or soil (cycloheximide is toxic to aquatic life with long-lasting effects).

Methods for containment and cleanup: For the finished product, wearing appropriate PPE, collect broken plates/spilled agar using a scoop or absorbent material and disinfect the area; avoid generating aerosols. Dispose of waste as described in Section 13.

7- Handling and Storage

Handling: Handle the finished plates using standard microbiological/good laboratory practice, at Biosafety Level 2 (or 3, per local risk assessment) when working with samples suspected of containing Legionella. Avoid contact with eyes, skin, and mucous membranes. Do not ingest. Wash hands after handling.

Storage: Store prepared plates tightly sealed/bagged, inverted, protected from light, drying, freezing and excessive heat. as indicated on the product label/certificate of analysis. Typically stored refrigerated (2-8°C) until the labeled expiry date. Do not use if the medium shows signs of contamination, excessive drying, or discoloration inconsistent with expected appearance.

Protect Inoculated plates must be stored and handled according to laboratory biosafety procedures.

8- Exposure Controls, Personal Protection

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

Engineering controls: Handle the finished product in a well-ventilated area. Use of a biological safety cabinet is recommended when inoculating plates with clinical/environmental samples. Avoid generation of aerosols.

Personal protective equipment:

- Eye protection:** Safety glasses for finished product handling.
- Skin protection:** Laboratory coat and disposable gloves for finished product handling.
- Respiratory protection:** Not normally required for handling the finished solid plates.

9- Physical and Chemical Properties

Appearance: Solid agar medium in plates; opaque, grey to black color (due to activated charcoal content)

Odor: Faint characteristic odor

Effective date: 30/09/2026	Hy-Labs Cat. No: PD074	MSDS FORMAT	
Doc. No: MSDS- PD074		MATERIAL SAFETY DATA SHEET	

pH: Approx. 6.6 – 7.0
Melting/Softening point: Agar gel liquefies on heating to approx. 85-95°C; sets/gels below approx. 40°C
Flammability: Not flammable (solid, aqueous gel)
Solubility: Not applicable (solid gel matrix)
Flash point, boiling point, vapour pressure, density: not applicable or not determined for the finished solid medium.

10- Stability and Reactivity

Chemical stability: The finished product is stable under normal conditions of storage (refrigerated, protected from light) until the labeled expiry date. Antibiotic/antifungal potency may decline with prolonged storage or light exposure.
Possibility of hazardous reactions: None known for the finished product under normal use.
Conditions to avoid: Freezing, excessive heat, prolonged light exposure, and microbial contamination during storage of the finished product.
Incompatible materials: Strong oxidizing agents (relevant to activated charcoal and raw powder handling during manufacturing; not applicable to the finished, prepared medium under normal use). Avoid excessive heat, freezing, desiccation and contamination.
Hazardous decomposition products: None expected under normal conditions of use and storage of the finished product.

11- Toxicological Information

Acute toxicity: The finished product is a low-hazard laboratory culture medium; all raw-material contributions, including cycloheximide, are calculated to be present at trace concentrations well below levels of acute toxicological concern in the finished plate - however, see the Section 2 note regarding cycloheximide's severity class in concentrate.
 Individual ingredients, particularly cycloheximide and antimicrobial agents, may present hazards in concentrated form; the finished product is diluted. Individual ingredients, particularly cycloheximide and antimicrobial agents, may present hazards in concentrated form; the finished product is diluted.
 Avoid ingestion, eye contact and skin contact. Inoculated plates may present biological hazards.
Skin/eye irritation, sensitization (finished product): Not expected to be significantly irritating or sensitizing at the concentrations present in the finished agar under normal end-user handling.
Biological hazard: As this medium supports growth of Legionella species, which can cause severe respiratory infection (Legionnaires' disease) including via aerosol transmission, inoculated plates and any manipulation of Legionella cultures should be treated as a significant infection risk and handled with appropriate biosafety containment.

12- Ecological Information

Ecotoxicity: The finished product contains a trace concentration of cycloheximide, which in concentrated form is toxic to aquatic life with long-lasting effects (Aquatic Chronic 2). Avoid releasing unused powder, unused medium, or manufacturing waste to the environment.
Persistence and degradability: The organic components (nutrient base, agar, charcoal, amino acids) are expected to be biodegradable; data on the environmental fate of trace cycloheximide/antibiotic residues in used media is limited.
Bioaccumulative potential: Not expected to bioaccumulate at the concentrations present in the finished plate.
Other adverse effects: Dispose of used/inoculated media and any cycloheximide-containing manufacturing waste appropriately (see Section 13) to avoid environmental release.

13- Disposal Information

This product is intended to culture Legionella, a significant respiratory pathogen; **once inoculated**, plates must be treated as biohazardous (biological) waste and handled with appropriate biosafety precautions.
 Autoclave (or otherwise appropriately disinfect/inactivate) used/inoculated plates prior to disposal, in accordance with your institution's biosafety procedures and applicable local, national, and international regulations.

Effective date: 30/09/2026	Hy-Labs Cat. No: PD074	MSDS FORMAT	
Doc. No: MSDS- PD074		MATERIAL SAFETY DATA SHEET	

Unused/unopened finished product may be disposed of as general laboratory waste in accordance with local regulations.
 Dispose of contents/container in accordance with applicable local, national, and international regulations.
Treat inoculated plates and materials potentially contaminated with Legionella or other microorganisms as infectious laboratory waste and decontaminate using a validated method before final disposal.

14- Transport Information

Finished product: Not classified as a dangerous good for transport by road (ADR), rail (RID), sea (IMDG), or air (IATA/ICAO) when unused and unopened.
UN Number: Not applicable (finished product)
UN Proper Shipping Name: Not applicable (finished product)
Transport Hazard Class(es): Not applicable (finished product)
Packing Group: Not applicable (finished product)
Environmental hazards: No
Special precautions: If shipping inoculated plates containing confirmed or suspected Legionella, applicable biological/infectious substance transport regulations (e.g., UN3373 Biological Substance, Category B, or UN2814 for Category A pathogens, as applicable) must be assessed and followed.
Protect plates from damage, leakage, excessive heat and freezing.
Inoculated material must be transported under applicable biological-substance requirements and institutional procedures.

15- Regulatory Information

The finished product is not classified as hazardous under Regulation (EC) No 1272/2008 (CLP) / GHS.
 As this medium is intended for the isolation of Legionella (notifiable/reportable in many jurisdictions and a recognized occupational hazard via aerosol exposure), users should ensure compliance with applicable local biosafety, biosecurity, and public health notification requirements.
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 sheet 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.