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| Effective date:<br>30/09/2026  | Hy-Labs Cat. No:<br><b>PD073</b> | <b>MSDS FORMAT</b>                |  |
| Doc. No:<br><b>MSDS- PD073</b> |                                  | <b>MATERIAL SAFETY DATA SHEET</b> | Replace Doc:<br>NA                                                                 |

| <b>1- Product and Company Identification</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                            |
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| <b>Product Name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>HY LEGIONELLA MEDIUM</b>                                                                                                                                                                                                                |
| <b>Reference number</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>PD073</b>                                                                                                                                                                                                                               |
| <b>Identified uses</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Enriched (non-selective) culture medium (agar plates) for the isolation and cultivation of Legionella species from clinical, water, or environmental samples. For In-Vitro Diagnostic (IVD) use only. Not for human or animal consumption. |
| <b>Manufacturer</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Hy-Laboratories Ltd.</b><br>Park Tamar, Rehovot, 76326, Israel<br>Tel: 972-8-9366475<br>Fax: 972-8-9366474                                                                                                                              |
| <b>2- HAZARDS IDENTIFICATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                            |
| <p><b>GHS Classification (Regulation (EC) No 1272/2008 / GHS):</b> The finished, prepared agar plate (a solid, water-based gel) is not classified as a hazardous mixture under GHS/CLP.</p> <p><b>Label elements:</b> No signal word, hazard pictogram, or hazard statement required for the finished product.</p> <p><b>Other hazards:</b> None known. It is a non-selective enrichment medium only.</p> <p><b>Biological hazard:</b> 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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                            |
| <b>3- COMPOSITION/INFORMATION ON INGREDIENTS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                            |
| <p>This product is a solid (agar) enriched (non-selective) culture medium in plates, prepared from the following components:</p> <p>1) Legionella BCYE Agar Base<br/>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)<br/>Concentration: 30.75 g/L<br/>Classification: Not classified as hazardous (GHS/CLP)</p> <p>2) ACES Buffer (N-(2-Acetamido)-2-aminoethanesulfonic acid)<br/>CAS No.: 7365-82-4<br/>Concentration: 4 g/L<br/>Classification: Generally not classified as hazardous; some suppliers note mild eye/skin irritation potential in concentrated powder form.</p> <p>3) L-Cysteine Hydrochloride, Anhydrous<br/>CAS No.: 52-89-1<br/>Concentration: 0.4 g/L<br/>Classification: Generally low-hazard; some suppliers note mild skin/eye irritation potential in concentrated powder form.</p> <p>4) Activated Charcoal<br/>CAS No.: 7440-44-0<br/>Concentration: 0.5 g/L<br/>Classification: Not classified as hazardous; combustible dust in concentrated powder form (dust explosion precautions apply to bulk powder handling, not to the finished plate).</p> |                                                                                                                                                                                                                                            |

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5) 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.

**Skin contact:** Wash with plenty of water and soap. Remove contaminated clothing. If irritation develops, seek medical attention.

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

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

**For inoculated plates,** 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/broken plate material from entering drains, waterways, or soil.

**Methods for containment and cleanup:** **For unused, uncontaminated** material: Wearing appropriate PPE, collect broken plates/spilled agar using a scoop or absorbent material; avoid generating aerosols/dust. Disinfect the affected surface with a suitable disinfectant, then rinse with water. Dispose of waste as described in Section 13.

**Treat inoculated plates** and spills involving potentially infectious material as biohazardous and follow the facility's validated spill-response procedure.

#### 7- Handling and Storage

**Handling:** Handle 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. Avoid generating dust when preparing from dehydrated powder.

**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; avoid freezing. Do not use if the medium shows signs of contamination, excessive drying, or discoloration inconsistent with expected appearance.

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

#### 8- Exposure Controls, Personal Protection

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

**Engineering controls:** Handle in a well-ventilated area. Use of a biological safety cabinet is recommended when inoculating plates with clinical/environmental samples or handling suspected Legionella cultures, per your laboratory's risk assessment.

**Personal protective equipment:**

- Eye protection:** Safety glasses recommended.
- Skin protection:** Laboratory coat and disposable gloves recommended.
- Respiratory protection:** Not normally required for handling sealed/solid media under normal conditions of use; avoid inhaling dust from broken plates or during manufacturing from powder.

**Handle inoculated plates** in accordance with the organism-specific risk assessment and applicable containment procedures. Avoid generation of aerosols.

## 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

**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.

**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).

**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 composed of common nutrient/buffer components; all raw materials are non-hazardous or present at concentrations well below levels of acute toxicological concern.

**Skin/eye irritation, sensitization (finished product):** Not expected to be significantly irritating or sensitizing at the concentrations present in the finished agar under normal use.

**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. Avoid ingestion, eye contact and skin contact. Inoculated plates may present biological hazards.

## 12- Ecological Information

**Ecotoxicity:** Not expected to be significantly harmful to aquatic organisms at the concentrations present; components are common culture-media constituents (buffer, amino acid, charcoal, agar). Prevent release to drains or the environment. Avoid uncontrolled environmental release of the product or contaminated materials.

**Persistence and degradability:** The organic components (nutrient base, agar, amino acid) are expected to be biodegradable.

**Bioaccumulative potential:** Not expected to bioaccumulate.

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

### 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.  
**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.

### 14- Transport Information

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  
**UN Proper Shipping Name:** Not applicable  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable  
**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.

### 15- Regulatory Information

The finished product is not classified as hazardous under Regulation (EC) No 1272/2008 (CLP) / GHS.  
All raw materials used in this formulation (BCYE agar base, ACES buffer, L-cysteine HCl, activated charcoal) are common, low-hazard laboratory reagents.  
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.