

Effective date: 24/09/2026	Hy-Labs Cat. No: PD037	MSDS FORMAT	
Doc. No: MSDS- PD037		MATERIAL SAFETY DATA SHEET	Replace Doc: NA

1- Product and Company Identification

Product Name	MUELLER HINTON AGAR +DEF.SHEEP BLOOD
Reference number	PD037
Identified uses	Selective/enriched culture medium (blood agar) for antimicrobial susceptibility testing and general laboratory microbiology use. 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 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.

Biological hazard: This product contains sheep blood, a biological material of animal origin. Although sourced from screened animals, it should be handled as potentially infectious using standard microbiological/biosafety (Universal Precautions) practices, since absence of transmissible agents cannot be absolutely guaranteed.

Other hazards: The finished, prepared product is a solid agar medium and is not flammable.

3- COMPOSITION/INFORMATION ON INGREDIENTS

This product is a solid (agar) culture medium in plates, containing the following components:

1) Mueller Hinton Agar II

Description: Complex mixture (beef extract, acid hydrolysate of casein, starch, agar)

Concentration: 38 g/L

Classification: Not classified as hazardous (GHS/CLP)

2) Sheep Blood (defibrinated)

Description: Biological material of animal origin

Concentration: 70 mL/L (7% v/v)

Classification: Not classified as a hazardous chemical; handle as a potential biohazard per standard laboratory practice (see Section 2 and Section 8).

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. If irritation persists, seek medical attention.

Skin contact: Wash with plenty of water and soap. If irritation develops, seek medical attention. If broken/non-intact skin contacts the product, treat as a potential biological exposure and follow your institution's exposure protocol.

Inhalation: Not an expected route of exposure for a solid agar medium. If dust from the dehydrated agar base is inhaled and irritation occurs, remove to fresh air.

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

Note to physician: Treat symptomatically. Because the product contains animal-derived blood, consider standard precautions for biological exposure (e.g., needlestick/mucous membrane contact) per institutional policy.

For inoculated plates: follow the laboratory biological-exposure procedure.

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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.

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

Thermal decomposition of organic material may produce irritating fumes.

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) due to the biological (blood-containing) nature of this product.

Environmental precautions: Prevent spilled material from entering drains, waterways, or soil.

Methods for containment and cleanup: Wearing appropriate PPE, collect broken plates/spilled agar using a scoop or absorbent material; avoid generating aerosols. Disinfect the affected surface with a suitable disinfectant (e.g., 10% sodium hypochlorite solution or equivalent) as per standard biosafety practice, then rinse with water. Dispose of waste as described in Section 13.

If the plate has been inoculated, treat all material as potentially infectious and follow the laboratory biological spill procedure.

7- Handling and Storage

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

Storage: Store prepared plates tightly sealed/bagged, inverted, protected from light, 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 hemolysis inconsistent with expected appearance.

Inoculated plates must be handled as potentially infectious material.

For laboratory use only.

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 in a well-ventilated area. Use of a biological safety cabinet is recommended when working with inoculated plates or unknown/pathogenic cultures, per your laboratory's risk assessment.

Personal protective equipment:

Eye protection: Safety glasses recommended.

Skin protection: Laboratory coat and disposable gloves recommended; treat as a biological material due to the sheep blood content.

Respiratory protection: Not normally required for handling sealed/solid media under normal conditions of use. Wash hands thoroughly after handling.

9- Physical and Chemical Properties

Appearance: Solid agar medium in plates; reddish/brownish-red color (from added sheep blood)

Odor: Faint characteristic odor

pH: Approx. 7.3 ± 0.1 (of the base medium prior to blood addition)

Melting/Softening point: Agar gel liquefies on heating to approx. 85-95°C; sets/gels below approx. 40°C

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Flammability: Not expected to be flammable (solid, water-based gel).
Solubility: Water-based gel; not applicable as a solid plate.
Other physical/chemical properties: Not determined or not applicable to the finished solid medium.

10- Stability and Reactivity

Chemical stability: Stable under normal conditions of storage (refrigerated, protected from light) until the labeled expiry date.
Possibility of hazardous reactions: None known under normal use.
Conditions to avoid: Freezing, excessive heat, dehydration, prolonged light exposure, and microbial contamination during storage.
Incompatible materials: Strong oxidizing agents, strong acids/bases (relevant to raw material handling; not applicable to the finished, prepared medium under normal use).
Hazardous decomposition products: No hazardous polymerization is expected. Thermal decomposition may generate carbon oxides, nitrogen oxides and other irritating products.

11- Toxicological Information

Acute toxicity: The finished product is a low-hazard laboratory culture medium composed of common nutrient components (beef extract, casein hydrolysate, starch, agar) and animal-derived blood.
Skin corrosion/irritation: Not expected to be irritating at the concentrations present in the finished product under normal use.
Serious eye damage/irritation: Not expected to be irritating at the concentrations present in the finished product.
Sensitization: Not known to be a significant skin or respiratory sensitizer.
Mutagenicity, carcinogenicity and reproductive toxicity: No classification proposed for the finished mixture based on available information.
Biological hazard: As with any product containing animal blood, there is a theoretical, low risk of exposure to zoonotic biological agents; handle using standard microbiological precautions.
Once inoculated, the plate may contain pathogenic or potentially pathogenic the biological hazard depends on the organism present.

12- Ecological Information

Ecotoxicity: Not expected to be significantly harmful to aquatic organisms at the concentrations present; components are common culture-media constituents (beef extract, casein hydrolysate, starch, agar) and animal-derived blood.
Persistence and degradability: The organic/biological components (nutrient base, agar, blood) are expected to be 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.
Avoid release of large quantities to drains or the environment. Dispose of microbiological material according to laboratory and applicable regulatory requirements.

13- Disposal Information

This product may contain or support the growth of microorganisms after use/inoculation and should be treated as biohazardous (biological) waste.
Autoclave (or otherwise appropriately disinfect) used/inoculated plates prior to disposal, in accordance with your institution's biosafety procedures and applicable local, national, and international regulations.
Unused/unopened 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.
Inoculated plates should be treated as potentially infectious biological waste and decontaminated by a validated method, such as autoclaving where appropriate, before final disposal.

14- Transport Information

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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 regulated as dangerous goods.

UN Proper Shipping Name: Not applicable

Transport Hazard Class(es): Not applicable

Packing Group: Not applicable

Environmental hazards: Not classified as dangerous goods for transport.

Special precautions: If shipping used/inoculated plates containing 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.

Transport prepared plates under validated conditions and protect against physical damage, freezing and excessive heat. Transport requirements may differ for plates containing viable microorganisms or clinical specimens.

15- Regulatory Information

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

Sheep blood is an animal-derived biological material; users should ensure compliance with applicable local regulations regarding handling of animal-derived materials and biological waste.

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

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

The hazard assessment in this document applies to the unused prepared medium. Applicable local, national and international requirements should be considered before placing the product on the market or using it in regulated environments.

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.