

Effective date: 27/09/2026	Hy-Labs Cat. No: PD162	MSDS FORMAT	
Doc. No: MSDS- PD162		MATERIAL SAFETY DATA SHEET	Replace Doc: NA

1- Product and Company Identification

Product Name	CDC ANAEROBE BLOOD AGAR
Reference number	PD162
Identified uses	Enriched selective culture medium (agar plates) for the isolation and cultivation of anaerobic bacteria. 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 - all supplement components (hemin, menadione/vitamin K3) are present at trace (mg/L) concentrations, well below the standard GHS concentration cut-offs for classification.

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.

Other hazards: This medium is specifically designed to cultivate anaerobic bacteria, some of which may be clinically significant pathogens; once inoculated, plates must be handled under appropriate biosafety containment.

Avoid ingestion, eye contact and unnecessary skin contact.

3- COMPOSITION/INFORMATION ON INGREDIENTS

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

1) Brucella Agar -

Description: Complex mixture (peptones, dextrose, sodium chloride, sodium bisulfite, agar)

Concentration: 43 g/L

Classification: Not classified as hazardous (GHS/CLP)

2) Hemin -

CAS No.: 16009-13-5

Description: Iron-porphyrin growth factor

Concentration: 5 mg/L

Classification: Generally regarded as low-hazard; not classified as hazardous - not significant at 5 mg/L in the finished agar.

3) Menadione (Vitamin K3), as Menadione Sodium Bisulfite -

CAS No.: 130-37-0

Description: Synthetic vitamin K3 derivative, growth factor

Concentration: 10 mg/L

Classification (concentrate): Warning - typically labeled with acute oral toxicity and eye/skin irritation hazard warnings. Note: **Final concentration** (0.001% w/v) is far below standard GHS generic concentration cut-offs for classification of the mixture.

4) Sheep Blood (defibrinated)

Description: Biological material of animal origin

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

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

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. 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. Seek medical attention if symptoms occur.

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.

If the plate has been inoculated, treat exposure as a potential biological exposure and follow the laboratory's established biosafety procedures.

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.

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:

For unused sterile plates: contain the material using appropriate laboratory practices and dispose of damaged or spilled material according to local laboratory procedures. 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.

For inoculated plates: avoid aerosol generation and disinfect the affected area using an appropriate validated laboratory disinfectant before disposal.

7- Handling and Storage

Handling: Handle using standard microbiological/good laboratory practice, at Biosafety Level appropriate to the anaerobic organisms being cultured. Avoid contact with eyes, skin, and mucous membranes. Do not ingest. Wash hands after handling. Avoid generating aerosols. Keep plates closed until use.

Inoculated plates must be handled as potentially infectious material.

Storage: Store prepared plates tightly sealed/bagged (ideally in an anaerobic environment/gas-generating pouch, per your protocol), inverted, protected from light, as indicated on the product label/certificate of analysis. Typically

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stored refrigerated (2-8°C) until the labeled expiry date; avoid freezing, excessive heat, and dehydration. Do not use if the medium shows signs of contamination, excessive drying, or hemolysis inconsistent with expected appearance.

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 and/or anaerobic chamber is recommended when working with inoculated plates or unknown/pathogenic anaerobic 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.

When handling **inoculated plates**, follow the laboratory's established biosafety procedures. Respiratory protection is not normally required for routine handling of intact sterile plates.

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. 7.1 – 7.5

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

Flammability: Not flammable (solid, water-based gel)

Solubility: Not applicable (solid gel matrix)

10- Stability and Reactivity

Chemical stability: Stable under normal conditions of storage (refrigerated, protected from light) until the labeled expiry date. Hemin and menadione (vitamin K3) content may gradually decline with prolonged storage or light exposure. Avoid excessive heat, freezing and dehydration.

Possibility of hazardous reactions: No hazardous polymerization is expected. None known under normal use.

Conditions to avoid: Freezing, excessive heat, 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: None expected under normal conditions of use and storage.

Inoculation with microorganisms may introduce biological hazards not inherent to the unused product

11- Toxicological Information

Acute toxicity: The finished product is a low-hazard laboratory culture medium; hemin and menadione are present at trace (mg/L) concentrations, well below levels of acute toxicological concern.

Hemin (raw material, concentrate): Generally low-hazard; some sources note minor potential for skin or eye irritation.

Menadione sodium bisulfite (raw material, concentrate): May be associated with mild eye/skin irritation and, per some supplier data, low acute oral toxicity in its concentrated powder form; not significant at the trace concentration used here.

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. Direct contact may cause mechanical or minor irritation. Inoculated plates may contain viable microorganisms capable of causing infection.

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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. As this medium supports the growth of anaerobic bacteria, some of which are clinically significant pathogens, inoculated plates should be handled as a potential infection risk.

12- Ecological Information

Ecotoxicity: Not expected to be significantly harmful to aquatic organisms at the concentrations present; components are common culture-media constituents and trace biochemical growth factors. Avoid uncontrolled release to the environment.

Persistence and degradability: The organic/biological components (nutrient base, agar, blood) are expected to be biodegradable.

Bioaccumulative potential: Not expected to bioaccumulate. Inoculated material may contain viable microorganisms and should be managed as biological waste.

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

13- Disposal Information

This product may contain or support the growth of microorganisms (including anaerobic pathogens) 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 shall be autoclaved or otherwise appropriately disinfected before final disposal, where required by the laboratory's biosafety procedures.

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 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.

Inoculated plates must be packaged and transported in accordance with applicable biological-material transport and biosafety requirements.

15- Regulatory Information

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

Raw material notes: Hemin and menadione sodium bisulfite (vitamin K3) are common laboratory growth factor supplements; both are present at trace (mg/L) concentrations well below standard mixture-classification concentration cut-offs.

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

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use.

Prepared for in-vitro laboratory use only.

Classification and handling requirements should be assessed in accordance with applicable local, national and international regulations and the actual condition of the product, particularly if inoculated.

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.