


Effective date: 17/12/25	Hy-Labs Cat. No: PD035	MSDS FORMAT MATERIAL SAFETY DATA SHEET	hylabs Replace Doc: NA
Doc. No: MSDS-PD035			

1- Product and Company Identification	
Product Name	MUELLER HINTON AGAR
Reference number	PD035
Identified uses	Used for antimicrobial disc diffusion susceptibility test for common and rapidly growing bacteria.
Manufacturer	Hy-Laboratories Ltd. Park Tamar, Rehovot, 76326, Israel Tel: 972-8-9366475 Fax: 972-8-9366474
2- HAZARDS IDENTIFICATION	
2.1 GHS/CLP classification (unused prepared plates): Not classified as hazardous; typical BD SDS list Mueller Hinton Agar as non-hazardous under OSHA/WHMIS when used as directed. Main risk is biological, from organisms grown on the plates, not from the sterile medium.	
2.2 Label elements: No signal word or pictogram required for unused plates; inoculated plates must be handled under institutional biohazard policies.	
2.3 Other hazards Results of PBT and vPvB assessment Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$. Endocrine disrupting properties Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$	
3- COMPOSITION/INFORMATION ON INGREDIENTS	
3.1 Substances not relevant (mixture)	
3.2 Mixtures Description of the mixture This product does not meet the criteria for classification in any hazard class according to GHS None of the components in the prepared plate are present at concentrations that trigger GHS hazard classification in unused state.	
4- First Aid Measures	
4.1 General notes No special measures are necessary Inhalation: Not expected to present a significant hazard; move to fresh air if aerosols or smoke from overheating are inhaled. Get medical advice if symptoms persist. Skin contact: Wash exposed skin with soap and water. Seek medical attention if irritation develops.	

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Eye contact:

Rinse cautiously with water for several minutes; remove contact lenses if easy. Get medical attention if irritation persists.

Ingestion:

Rinse mouth with water; do not induce vomiting in unconscious person. Product is not intended to be ingested; obtain medical advice if a significant amount is swallowed.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

5- Fire Fighting Measures**5.1 Extinguishing media**

Suitable extinguishing media: Water spray, foam, dry chemical, CO₂.

Unsuitable extinguishing media: water jet

Combustion products: CO, CO₂, and irritating fumes from burning agar and plastic plate.

Protective equipment: Standard firefighting PPE and SCBA.

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂), May produce toxic fumes of carbon monoxide if burning.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

6- Accidental Release Measures**6.1 Unused plates:**

Pick up mechanically, place in general lab waste if allowed by local rules. Wash surface with water and mild detergent.

6.2 Used plates:

Treat as biohazard. Wear gloves, lab coat, eye protection. Collect into biohazard bag or rigid container; disinfect the area with suitable disinfectant (e.g., 0.1–1% hypochlorite or 70% ethanol) according to institutional biosafety procedures.

6.3 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No special measures are necessary.

6.4 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.5 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains. Take up mechanically.

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Advice on how to clean up a spill
 Take up mechanically.
 Other information relating to spills and releases
 Place in appropriate containers for disposal. Ventilate affected area.

6.6 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

7- Handling and Storage

7.1 Precautions for safe handling

Handling (unused):

Use good laboratory hygiene. Avoid ingestion and unnecessary skin/eye contact.
 Use PPE appropriate to the organisms tested (lab coat, gloves; eye protection when splashes possible).

Handling (used):

Treat as infectious material; use BSL-2 practices for clinical isolates and follow CLSI disc diffusion procedures.

No special measures are necessary.
 Advice on general occupational hygiene
 Keep away from food, drink and animal feeding stuffs.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Store ready plates at 2–8 °C, protected from light and desiccation; keep in original sleeves/bags, level, and agar side down once dried to prevent condensation.
 Do not freeze. Discard plates that are contaminated, excessively dry, cracked, or with abnormal color.

8- Exposure Controls, Personal Protection

8.1 Control parameters

National limit values
 Occupational exposure limit values (Workplace Exposure Limits)

8.2 Exposure controls

Individual protection measures (personal protective equipment)
 controls: Standard lab ventilation; biological safety cabinet when handling pathogens.
 PPE:
 Lab coat, disposable gloves.
 Safety glasses / face protection when splash or aerosol risk exists.

Exposure limits: No occupational exposure limits established for the finished prepared medium;

Engineering

Environmental exposure controls
 Keep away from drains, surface and ground water

9- Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Form: Solid gel in plastic Petri dish
 Color: Light amber to light beige, clear to slightly opalescent.

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Odor: Slight, meat-like.
pH: about 7.2 - 7.4.
Melting point: Agar gel softens/melts above ~80–90 °C.
Water solubility: Agar gel is not soluble but disperses in hot water.

9.2 Other information

Information with regard to physical hazard classes:
hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics: There is no additional information.

10- Stability and Reactivity

10.1 Stability:

Stable for labeled shelf life when stored at 2–8 °C in original packaging.

10.2 Conditions to avoid:

Excess heat, freezing, drying, microbial contamination (for unused plates).

10.3 Hazardous decomposition:

Combustion yields CO, CO₂ and irritating fumes.

11- Toxicological Information

11.1 Acute toxicity:

Low; components are common microbiological nutrients and do not show significant acute toxicity at concentrations present.

11.2 Irritation:

Prolonged contact may cause mild transient skin or eye irritation in sensitive individuals.

11.3 Sensitization / chronic effects:

No data indicating sensitization or chronic toxicity for the unused medium at typical exposure levels.

11.4 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

11.5 Information on other hazards

There is no additional information

11.6 Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

This mixture does not meet the criteria for classification.

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4. May be harmful if swallowed.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

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Carcinogenicity
Shall not be classified as carcinogenic.

Reproductive toxicity
Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure
Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure
Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

12- Ecological Information

12.1 Toxicity
Shall not be classified as hazardous to the aquatic environment.

Ecotoxicity:
Not expected to pose significant hazard in small lab quantities; components are largely biodegradable.
Used plates may contain pathogenic organisms and must not be released untreated into the environment.

12.2 Persistence and degradability
Data are not available.

12.3 Bioaccumulative potential
Data are not available.

12.4 Mobility in soil
Data are not available.

12.5 Results of PBT and vPvB assessment
Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

12.6 Endocrine disrupting properties
Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects
Data are not available.

13- Disposal Information


13.1 Waste treatment methods

Unused, uncontaminated plates:
Dispose as non-hazardous laboratory waste in accordance with local regulations, or autoclave and discard if institutional policy requires.

Used / inoculated plates:
Autoclave or disinfect per institutional biosafety procedures, then dispose as regulated medical/infectious waste.

Consult the appropriate local waste disposal expert about waste disposal.
Sewage disposal-relevant information
Do not empty into drains.
Waste treatment of containers/packagings
Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

13.2 Relevant provisions relating to waste
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

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13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

14- Transport Information

Unused plates:

Not regulated as dangerous goods under ADR/RID, IMDG, IATA.

Used plates with infectious agents:

May fall under "Biological substance, Category B" or other infectious substance regulations if shipped; classify according to content.

15- Regulatory Information

15.1 Classification:

Mixture not classified as hazardous under GHS when unused; refer to BD SDS for exact jurisdictional status (OSHA, WHMIS, REACH, etc.).

Product is intended for professional laboratory use under applicable IVD and medical device frameworks in relevant regions.

15.2 Safety Phrases:

Observe the general safety regulation.

16- Other Information

Abbreviations and acronyms

Abbr. Descriptions of used abbreviations

ADR Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)

Ceiling-C Ceiling value

DGR Dangerous Goods Regulations (see IATA/DGR)

ED Endocrine disruptor

EH40/2005 EH40/2005 Workplace exposure limits (<http://www.nationalarchives.gov.uk/doc/open-government-licence/>)

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

GB REACH The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)

GHS "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations

IATA International Air Transport Association

IATA/DGR Dangerous Goods Regulations (DGR) for the air transport (IATA)

ICAO International Civil Aviation Organization

IMDG International Maritime Dangerous Goods Code

NLP No-Longer Polymer

PBT Persistent, Bioaccumulative and Toxic


REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)

STEL Short-term exposure limit

TWA Time-weighted average

VOC Volatile Organic Compounds

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vPvB Very Persistent and very Bioaccumulative
WEL Workplace exposure limit

The information in this MSDS is based on current and reliable sources but does not purport to be all inclusive and shall be used only as a guide.

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

This information cannot be considered a guarantee of the properties of the product; it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products.

All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.