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|------------------------------------------------|--------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------------|
| Effective date:<br>29/09/2026                  | Hy-Labs Cat. No:<br><b>PD054</b><br><b>DD005</b> | <b>MSDS FORMAT</b><br><b>MATERIAL SAFETY DATA SHEET</b> |  |
| Doc. No:<br><b>MSDS- PD054</b><br><b>DD005</b> |                                                  |                                                         | Replace Doc:<br>NA                                                                 |

## 1- Product and Company Identification

|                         |                                                                                                                                                                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Name</b>     | <b>NYC MEDIUM</b>                                                                                                                                                                                                                                |
| <b>Reference number</b> | <b>PD054 / DD005</b>                                                                                                                                                                                                                             |
| <b>Identified uses</b>  | Prepared microbiological culture medium in agar plates for cultivation and isolation of fastidious microorganisms, including Neisseria species, when used in accordance with the applicable laboratory method. For in-vitro laboratory use only. |
| <b>Manufacturer</b>     | <b>Hy-Laboratories Ltd.</b><br>Park Tamar, Rehovot, 76326, Israel<br>Tel: 972-8-9366475<br>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 antimicrobial supplements, hydrochloric acid residues, and other hazardous raw materials are present at trace or heavily diluted concentrations, below the standard GHS concentration cut-offs for classification (see Section 3).

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

**Antimicrobial supplements:** The medium contains antibiotics/antifungals (vancomycin, colistin, trimethoprim, nystatin, amphotericin B). Several of these are sensitizers, irritants, or reproductive/target-organ toxicants in concentrated powder form; the finished plate contains only mg/L residues. Individuals with known antibiotic allergies should exercise caution.

**Growth factors Supplements:** the finished plate presents no corrosive hazard.

**Biological hazard:** The medium contains equine (horse) serum and, via the Fildes Extract, defibrinated horse blood - biological materials of animal origin that should be handled as potentially infectious (Universal Precautions). The medium is also designed to grow pathogenic Neisseria; once inoculated with clinical specimens, plates must be handled under appropriate biosafety containment (Biosafety Level 2 or per local requirements).

**Avoid ingestion, eye contact, and unnecessary contact with the medium.**

## 3- COMPOSITION/INFORMATION ON INGREDIENTS

This product is a solid (agar) selective enriched culture medium in plates, prepared from the following components. Concentrations are per liter of finished medium unless stated.

### A) BASE MEDIUM COMPONENTS

- 1) Pepto complex: 15 g/L. Peptone mixture (nutrient source). Not classified as hazardous.
- 2) Agar: 15 g/L. Gelling agent. Not classified as hazardous.
- 3) Cornflour (corn starch): 1 g/L. Not classified as hazardous.
- 4) Potassium Dihydrogen Phosphate (KH<sub>2</sub>PO<sub>4</sub>), analytical grade CAS 7778-77-0: 1 g/L. Not classified as hazardous.
- 5) Dipotassium Hydrogen Phosphate Trihydrate (K<sub>2</sub>HPO<sub>4</sub>·3H<sub>2</sub>O) CAS 16788-57-1: 5.23 g/L. Not classified as hazardous.
- 6) Sodium Chloride, EMPROVE - CAS 7647-14-5): 5 g/L. Not classified as hazardous.

### B) BIOLOGICAL AND NUTRIENT SUPPLEMENTS

- 7) Equine (horse) serum: 120 mL/L (12% v/v). Biological material of animal origin; not classified as a hazardous chemical; handle as a potential biohazard.
- 8) Yeast dialyzate: 25 mL/L (2.5% v/v). Yeast-derived nutrient supplement; not classified as hazardous.
- 9) Glucose (dextrose) solution 50%: 10 mL/L, giving approx. 5 g/L glucose (0.5% w/v). Not classified as hazardous.
- 10) BioVitex growth supplement with Restoring Fluid: 0.2 vial/L. Chemically defined growth supplement (typically vitamins, amino acids, cofactors, glucose, and a trace of ferric salt). Not classified as hazardous at the

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concentrations present.

- 11) Dimethyl Sulfoxide (DMSO) - CAS 67-68-5): 0.13 mL/L (approx. 0.013% v/v). Not classified as hazardous by most suppliers (some list a combustible liquid); note DMSO can enhance skin absorption of dissolved substances in concentrated form.

#### C) **ANTIMICROBIAL SUPPLEMENTS**

- 12) VCNT Selective Supplement -: 2 vials/L. Freeze-dried combination of vancomycin, colistin, trimethoprim, and nystatin. Based on typical VCNT composition (per vial: vancomycin 1.5 mg, colistin 3.75 mg, trimethoprim 2.5 mg, nystatin 6250 IU), the approximate final concentrations are: vancomycin about 3 mg/L, colistin about 7.5 mg/L, trimethoprim about 5 mg/L, nystatin about 12,500 IU/L.

Note: All antimicrobial concentrations above are far below standard GHS generic concentration cut-offs (typically 1% for sensitizers and 0.3% for reproductive toxicants) for classification of the finished mixture.

- D) **Growth factors Supplements:** The finished Growth factors Supplements (Fildes Extract Solution) is pH-adjusted to approx. 6.9 and is not classified as hazardous.

Contribution to the finished plate (30 mL/L, i.e. 3% dilution): HCl (ex-32%) approx. 0.81 mL/L; HCl (ex-fuming 37%) approx. 0.70 mL/L; pepsin approx. 135 mg/L (0.0135% w/v); sodium chloride approx. 0.17 g/L; horse blood approx. 6.75 mL/L (0.675% v/v).

- E) **Water** (purified/deionized) - solvent/diluent, balance to volume.

**Overall:** All hazardous raw-material contributions in the finished plate are far below standard GHS generic concentration cut-offs. Antibiotic contents of the VCNT supplement are based on typical published composition and should be verified against the supplier certificate.

## 4- First Aid Measures

**Eye contact (finished product):** 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 antibiotic exposure), seek medical attention. If broken skin contacts the product, follow your institution's biological exposure protocol.

**Inhalation:** Not an expected route of exposure for the finished 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. Manufacture involves concentrated hydrochloric acid, pepsin (respiratory sensitizer), and antibiotic powders (vancomycin, trimethoprim, colistin, nystatin, amphotericin B); consider these if a manufacturing-related exposure is reported. The finished product also contains horse serum/blood and may support growth of pathogenic *Neisseria* when inoculated.

**For inoculated plates,** inform medical personnel of possible biological exposure.

## 5- Fire Fighting Measures

The finished, prepared product is a solid, water-based 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, CO<sub>2</sub>, dry chemical, foam).

**Unsuitable extinguishing media:** None known.

**Specific hazards:** None known for the finished product. Concentrated hydrochloric acid (manufacturing raw material) is not flammable but may react with metals to release flammable hydrogen gas.

**Special protective equipment for firefighters:** Use self-contained breathing apparatus and full protective equipment

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for fires involving surrounding materials. Burning packaging may generate 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). For spills of concentrated acid during manufacturing, use acid-resistant PPE (chemical goggles, acid-resistant gloves and apron). If the plate has been inoculated, treat as a biohazard.

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

**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.

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

**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 as required by local regulations when working with clinical specimens. 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.

**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 the finished product. Use adequate laboratory ventilation; avoid generating aerosols.

**Engineering controls:** Handle the finished product in a well-ventilated area. Use of a biological safety cabinet is recommended when inoculating plates with clinical specimens.

**Personal protective equipment:**

**Eye protection:** Safety glasses for finished product handling; chemical splash goggles when handling concentrated acids or powders.

**Skin protection:** Laboratory coat and disposable gloves for finished product handling; acid-resistant gloves and apron when handling concentrated acids. Individuals with known antibiotic hypersensitivity should take particular care.

**Respiratory protection:** Not normally required for handling the finished solid plates; a suitable respirator may be needed when handling acid mists or pepsin/antibiotic powders without adequate local exhaust ventilation.

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

## 9- Physical and Chemical Properties

**Appearance:** Solid agar medium in plates; opaque, light brown to reddish-brown (from serum, yeast dialyzate, and horse blood in the Fildes Extract)

**Odor:** Faint characteristic odor

**pH:** Approx. 6.9 – 7.3

**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, and solubility:** not applicable or not determined for the finished solid medium.

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## 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 potency and serum/supplement quality may decline with prolonged storage, heat, 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.

**Incompatible materials:** Strong oxidizing agents, strong bases.

**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 antimicrobial and chemical raw material contributions are present at trace or diluted 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 end-user handling; individuals with known antibiotic allergies should exercise caution.

**Biological hazard:** As with any product containing animal serum/blood, there is a theoretical, low risk of exposure to zoonotic biological agents. As this medium supports growth of pathogenic *Neisseria* (e.g., *N. gonorrhoeae*, *N. meningitidis*), inoculated plates should be handled as a potential infection risk.

**Avoid ingestion, eye contact, and skin contact.**

## 12- Ecological Information

**Ecotoxicity:** The finished product contains trace concentrations of antibiotics/antifungals (vancomycin, colistin, trimethoprim, nystatin, amphotericin B); Do not release the product or contaminated washings into drains or the environment. Trimethoprim is classified by some suppliers as toxic to aquatic life with long-lasting effects in concentrate. Antimicrobial ingredients may be harmful to aquatic organisms; prevent uncontrolled environmental release.

**Persistence and degradability:** The organic/biological components (nutrient base, agar, serum, blood) are expected to be biodegradable; data on the environmental fate of trace antibiotic residues in used media is limited.

**Bioaccumulative potential:** Not expected to bioaccumulate at the concentrations present.

**Other adverse effects:** Dispose of used/inoculated media appropriately (see Section 13) to avoid release of antibiotic residues or cultured microorganisms into the environment. Neutralize any concentrated acid waste from manufacturing before disposal.

## 13- Disposal Information

This product is intended to support growth of pathogenic *Neisseria*; **once inoculated**, plates must be treated as biohazardous (biological) waste. It also contains antibiotic residues.

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. Do not discharge antibiotic-containing waste directly to drains.

**Unused/unopened finished product** may be disposed of as general laboratory waste in accordance with local regulations, unless local rules require antibiotic-containing waste to be handled separately.

Dispose of contents/container in accordance with applicable local, national, and international regulations.

## 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)

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**UN Proper Shipping Name:** Not applicable (finished product)

**Transport Hazard Class(es):** Not applicable (finished product). Protect plates from damage, leakage, excessive heat, and freezing.

**Packing Group:** Not applicable (finished product)

**Environmental hazards:** No

**Special precautions:** If shipping **inoculated plates** containing confirmed or suspected pathogens (e.g., *Neisseria gonorrhoeae* or *N. meningitidis*), applicable biological/infectious substance transport regulations (e.g., UN3373 Biological Substance, Category B, or UN2814 where applicable) must be assessed and followed based on the specific organism(s) present.

### 15- Regulatory Information

The finished product is not classified as hazardous under Regulation (EC) No 1272/2008 (CLP) / GHS; all hazardous raw materials are present below standard mixture-classification concentration cut-offs.

Horse serum and blood are animal-derived biological materials; users should ensure compliance with applicable local regulations regarding animal-derived materials and biological waste.

As this medium supports growth of *Neisseria gonorrhoeae*/*N. meningitidis* (notifiable/reportable in many jurisdictions), 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.

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

### 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.