1- Product and Company Identification

Product Name	STREPTOCOCCI SELECTIVE MEDIUM STREP. SELECTIVE /STREP. SELECTIVE+BACITRACIN
Reference number	PD133 - DD092
Identified uses|	A selective enriched medium for the isolation of haemolytic Streptococcus from throat swabs and other clinical specimens.
Manufacturer	**Hy-Laboratories Ltd.** Park Tamar, Rehovot, 76326, Israel Tel: 972-8-9366475 Fax: 972-8-9366474

2- HAZARDS IDENTIFICATION

2.1 GHS (Globally Harmonized System) /CLP classification:

The finished agar plate is generally not classified as hazardous under GHS when unused;
Not classified as hazardous under the Globally Harmonized System (GHS) when handled as supplied. components are peptones, salts, agar, 5% defibrinated sheep blood, and low-concentration selective antibiotics.
Bacitracin at 300 U/L (≈0.3 mg/L) is far below levels used in pure-substance SDS classifications and is immobilized in the agar; systemic exposure is unlikely under normal handling.
Bacitracin (300 U/L), an antibiotic that may cause allergic reactions in sensitized individuals upon repeated or prolonged exposure.

Contains 5% defibrinated sheep blood (animal-origin material). Although sourced from healthy animals and screened, it should be treated as potentially biohazardous.

2.2 Label elements (unused):

No signal word or pictograms typically required; once inoculated, treat plates as biohazard according to institutional policy.

Label Elements:

Signal Word: None
Hazard Statements: None
Precautionary Statements:
Use appropriate personal protective equipment (PPE).
Avoid ingestion and contact with eyes or broken skin.
Handle in accordance with good laboratory and microbiological practices.

2.3 Other Hazards:

Principal hazards are biological after inoculation (pathogenic streptococci and other clinical isolates).
After inoculation with microorganisms, plates must be handled and disposed of as biohazardous waste.

3- COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture: Prepared agar-based culture medium Composition per L.

Select. strep agar modified 40gr:
Enzymatic digest of casein, Type H 15 gr
Enzymatic digest of soybean meal 5gr
NaCl 5gr
Agar 15gr
Selective agent 0.0028gr
Donor sheep blood 5%

Bacitracin only in DD092 – 300U
Final pH: 7.3 ± 0.2 at 25 °C.
No individual component in the finished plate is present at a concentration that typically triggers GHS classification; however, antibiotics and animal blood require appropriate handling and waste controls.

3.2 Hazardous Ingredients:

Bacitracin: present at low concentration; not classified as hazardous in the finished product under GHS.

4- First Aid Measures

4.1 For unused plates:

Inhalation:

Not expected to be hazardous. If fumes or aerosols from overheating/autoclaving are inhaled, move to fresh air and seek medical attention if symptoms develop.

Skin contact:

Wash affected area with soap and water. Seek medical advice if irritation or allergic reaction occurs.

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. Product is not intended for ingestion; Do not induce vomiting. Seek medical advice if discomfort occurs. Consult a physician if significant amount is swallowed or if symptoms appear.

For used plates:

Manage as potential infectious exposure according to your biosafety level (usually BSL-2 for β-hemolytic streptococci).

4.2 General Advice:

Seek medical attention if symptoms persist or if an allergic reaction is suspected.

5- Fire Fighting Measures

5.1 Suitable extinguishing media:

Water spray, foam, dry chemical, CO_2.

5.2 Hazardous combustion products:

CO, CO_2, nitrogen oxides and other irritating organic fumes from burning agar, proteinaceous blood, and plastic.

5.3 Special protective equipment:

Standard firefighting PPE with self-contained breathing apparatus.

5.4 Specific Hazards:

Product is not flammable. Thermal decomposition may produce carbon oxides and nitrogen oxides.

6- Accidental Release Measures

6.1 Spillage of unused plates:

Pick up plates and fragments mechanically.
Place in suitable waste container.
Clean affected surface with water and detergent.

6.2 Spillage of used / inoculated plates:

Wear gloves, lab coat, and eye protection as appropriate.
Collect broken plates and agar into a biohazard bag or sharps container.
Disinfect contaminated surfaces with appropriate disinfectant (e.g., 0.1–1% sodium hypochlorite or 70%

ethanol) following institutional biosafety procedures.

6.3 Personal Precautions:
Wear laboratory PPE (gloves, lab coat, eye protection).

6.4 Environmental Precautions:
Prevent release to drains or the environment.

6.5 Methods for Cleanup:
Collect material using disposable tools.
Decontaminate the area with a suitable disinfectant.
Dispose of waste in accordance with laboratory and local regulations.

7- Handling and Storage

7.1 Handling:
Use good laboratory and microbiological practices.
Avoid eating, drinking, or smoking in work areas.

Handling – unused plates:
Use in accordance with good microbiological practice.
Avoid ingestion and unnecessary skin/eye contact.
Observe universal precautions when working with animal blood products.

Handling – used plates:
Treat as potentially infectious material.
For clinical streptococci and mixed flora, use BSL-2 practices (biosafety cabinet for manipulations that may generate aerosols).

7.2 Storage:
2–8 °C, in original sleeves or sealed plastic bags, agar side down once surface is dry.
Protect from light, desiccation, overheating and freezing.
Discard plates that show contamination, excessive dehydration, color change, or hemolysis prior to inoculation.

Protect from dehydration, excessive heat, freezing, and contamination.
Do not use after the expiration date.

8- Exposure Controls, Personal Protection

8.1 Exposure Limits:
No occupational exposure limits established for the mixture. components (peptones, agar, low-dose bacitracin, sheep blood) are not present at concentrations that carry individual OELs for normal lab use.

8.2 Engineering Controls:
Adequate general laboratory ventilation.
Use a certified biosafety cabinet when inoculating with or manipulating infectious material.

8.3 Personal protective equipment (PPE)**:**
Lab coat, disposable gloves (nitrile or latex).
Safety glasses / goggles or face shield when there is potential for splashes or aerosols.

9- Physical and Chemical Properties

Appearance: Prepared agar plate
Color: Cherry-red, opaque,
Odor: Mild
Physical State: Solid gel at room temperature; softens/melts when heated above ~80–90 °C.

pH: 7.1 - 7.5
Solubility: Agar gel not soluble but disperses in hot water.
Flash Point: Not applicable

10- Stability and Reactivity

10.1 Stability: Stable under recommended storage conditions for stated shelf life.
10.2 Conditions to avoid: Excessive heat, freezing, drying, and microbial contamination (for unused plates).
10.3 Reactivity: No hazardous reactions under normal laboratory conditions.
10.4 Incompatible Materials: Strong oxidizing agents.
10.5 Hazardous decomposition products: On combustion, CO, CO_2, NOx and other irritating fumes.

11- Toxicological Information

11.1 Unused plates:

Expected to be of low acute toxicity.
Prolonged or repeated contact may cause mild skin or eye irritation in susceptible individuals.
Bacitracin, at trace levels immobilized in agar, is not expected to cause systemic toxicity; however, individuals with known hypersensitivity to bacitracin or animal blood products should avoid direct contact.

Used plates:

Toxicological risk is dominated by the microorganisms grown (e.g., Streptococcus pyogenes), not the medium itself; manage under appropriate biosafety rules.

11.2 Acute Toxicity: Not expected to be toxic.
11.3 Skin/Eye Irritation: Prolonged contact may cause mild irritation.
11.3 Sensitization: Bacitracin may cause sensitization in susceptible individuals.
11.4 Chronic Effects: No known chronic effects associated with normal laboratory use.

12- Ecological Information

12.1 Ecotoxicity:

Not expected to be environmentally hazardous in small quantities.

12.2 Persistence and Degradability:

Components are expected to be biodegradable. small laboratory quantities are not expected to pose significant environmental risk. Antibiotics and pathogenic organisms on used plates must not be released untreated into the environment.

13- Disposal Information

13.1 Unused plates:

Dispose of as non-hazardous laboratory waste if permitted by local rules; some institutions prefer or require autoclaving due to presence of antibiotics and animal blood.

13.2 Used / inoculated plates:

Autoclave (or otherwise effectively disinfect) plates before disposal.
After decontamination, discard as regulated medical/infectious waste in accordance with local regulations and institutional policy.

14- Transport Information

14.1 Unused plates:

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

14.2 Used plates:

If containing infectious agents, must be packaged and shipped according to applicable infectious substance regulations (e.g., UN 3373, Category B), where relevant.

14.3 UN Number: Not regulated

14.4 Proper Shipping Name: Not applicable
14.5 Hazard Class: Not applicable
14.6 Packing Group: Not applicable

15- Regulatory Information

For laboratory and in vitro diagnostic use only.

Not classified as hazardous under GHS, CLP Regulation (EC) No 1272/2008, or OSHA Hazard Communication Standard when supplied.

Product intended for professional use under applicable clinical laboratory / IVD frameworks.

16- Other Information

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.