

Effective date: 28/09/2026	Hy-Labs Cat. No: PD046	MSDS FORMAT	
Doc. No: MSDS- PD046		MATERIAL SAFETY DATA SHEET	Replace Doc: NA

1- Product and Company Identification	
Product Name	SS AGAR
Reference number	PD046
Identified uses	Selective and differential culture medium (agar plates) for the isolation of Salmonella and, to a lesser degree, Shigella species from clinical (e.g., feces), food, or environmental samples. 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 (a solid, water-based gel) is not classified as a hazardous mixture under GHS/CLP. The medium contains microbiological nutrients and selective/differential components. Label elements: No signal word, hazard pictogram, or hazard statement required for the finished product. Component note: The medium contains brilliant green, a triarylmethane dye used as a selective agent. in this medium it is present only at trace level (typically about 0.33 mg/L). Other components (bile salts, neutral red, ferric citrate) may be mild irritants in concentrated powder form only. Biological hazard: This medium is designed to isolate enteric pathogens (Salmonella, Shigella). Once inoculated with a clinical, food, or environmental sample, plates must be treated as a biohazard and handled under appropriate biosafety containment (Biosafety Level 2 or per local requirements).	
3- COMPOSITION/INFORMATION ON INGREDIENTS	
This product is a solid (agar) selective/differential culture medium in plates, prepared from the following component: 1) SS Agar (Salmonella Shigella Agar) Description: Complex mixture. Typical (classical) formulation components include meat/beef extract, peptone, lactose, bile salts, sodium citrate, sodium thiosulfate, ferric citrate/ferric ammonium citrate, brilliant green, neutral red (pH indicator), and agar (exact formulation per supplier). Concentration: 60 g/L Classification (finished plate): Not classified as hazardous (GHS/CLP) Components of note in the dry powder: - Brilliant green (CAS 633-03-4): typically, about 0.33 mg/L of medium (approx. 0.00003% w/v). - Bile salts (CAS 8008-63-7): typically, a few g/L. - Neutral red (CAS 553-24-2): present at trace level (mg/L); - Sodium thiosulfate (CAS 7772-98-7), sodium citrate, lactose, peptones, agar: not classified as hazardous. Note: These components are far below standard GHS generic concentration cut-offs in the finished plate. Because brilliant green is aquatic-toxic, mixture classification for aquatic hazards can involve multiplying factors; the trace level used here is still expected to fall below classification thresholds, but this should be confirmed by your EHS/regulatory reviewer. Component amounts above are indicative only and based on typical SS Agar formulations; refer to the supplier SDS for the exact composition. 2) 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. Continue rinsing. Seek medical attention if irritation persists.	
Page 1 of 4	

Effective date: 28/09/2026	Hy-Labs Cat. No: PD046	MSDS FORMAT	hylabs®
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Skin contact: Wash with plenty of water and soap. If irritation or rash develops, seek medical attention. Note that dyes in the medium may temporarily stain skin.

Inhalation: Not an expected route of exposure for a solid agar medium. Move to fresh air if discomfort occurs and seek medical advice if symptoms persist.

Ingestion: Rinse mouth with water. Do not induce vomiting. Seek medical advice if discomfort occurs or if a significant amount is swallowed, or if exposure involved inoculated material. For inoculated plates, follow institutional procedures for biological exposure.

Note to physician: Treat symptomatically. If the plate has been inoculated with a clinical/food sample, also consider the risk of exposure to enteric pathogens (e.g., Salmonella, Shigella) present in the sample.

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 for the finished product. The dehydrated powder is a combustible organic dust; avoid generating dust clouds.

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). If the plate has been inoculated, treat as a biohazard, avoid generating aerosols.

Environmental precautions: Prevent spilled/broken plate material and unused powder from entering drains, waterways, or soil (the medium contains a trace of an aquatic-toxic dye).

Methods for containment and cleanup: Wearing appropriate PPE, collect broken plates/spilled agar using a scoop or absorbent material; avoid generating aerosols/dust. Disinfect the affected surface with a suitable disinfectant, then rinse with water. Dispose of waste as described in Section 13.

For broken, leaking, or inoculated plates, treat material as potentially infectious and disinfect using a validated laboratory disinfectant procedure before disposal.

7- Handling and Storage

Handling: Handle using standard microbiological/good laboratory practice, at Biosafety Level 2 or as required by local regulations when working with clinical/food samples suspected of containing enteric pathogens. 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 excessive heat, direct light, freezing, and dehydration, 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 discoloration 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 is recommended when inoculating plates with clinical/food samples or handling suspected enteric pathogen cultures, per your laboratory's risk assessment. Use local exhaust ventilation or a dust-controlled area when handling the dehydrated powder.

Personal protective equipment: Use appropriate laboratory PPE:

Eye protection: Safety glasses recommended (chemical splash goggles when handling dehydrated powder).

Effective date: 28/09/2026	Hy-Labs Cat. No: PD046	MSDS FORMAT	
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Skin protection: Laboratory coat and disposable gloves recommended.
Respiratory protection: Not normally required for handling the finished solid plates; a dust mask/respirator may be appropriate when handling the dehydrated powder without adequate ventilation.

9- Physical and Chemical Properties

Appearance: Solid agar medium in plates; clear to slightly opalescent, reddish-orange color (due to neutral red indicator)
Odor: Faint characteristic odor
pH: Approx. 7.0 ± 0.2 (typical for SS Agar)
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)

10- Stability and Reactivity

Chemical stability: Stable under normal conditions of storage (refrigerated, protected from light) until the labeled expiry date. Note that bile salts may crystallize over time without affecting performance.
Possibility of hazardous reactions: None known under normal use.
Conditions to avoid: Freezing, excessive heat, prolonged light exposure, dehydration and microbial contamination during storage.
Incompatible materials: Strong oxidizing agents, strong acids/bases (relevant to raw powder handling; not applicable to the finished, prepared medium under normal use).
Hazardous decomposition products: No hazardous polymerization is expected under normal conditions of use. None expected under normal conditions of use and storage.

11- Toxicological Information

Acute toxicity: The finished product is a low-hazard laboratory culture medium composed largely of nutrients, sugars, salts, and agar; the selective dye and bile salt components are present at low concentrations well below levels of acute toxicological concern. Direct contact may cause minor mechanical or irritation effects. Brilliant green present at only trace level in the finished plate.
Skin/eye irritation, sensitization (finished product): Not expected to be significantly irritating or sensitizing at the concentrations present in the finished plate under normal end-user handling.
Biological hazard: As this medium is intended to isolate enteric pathogens (Salmonella, Shigella), any inoculated plate should be regarded as a potential source of infection and handled accordingly.

12- Ecological Information

Ecotoxicity: The medium contains a trace concentration of brilliant green, which in concentrated form is very toxic to aquatic life; avoid releasing unused powder, unused medium, or used plates to drains or the environment.
Persistence and degradability: The organic components (sugars, peptones, agar) are expected to be biodegradable; data on the environmental fate of the trace dye 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 cultured pathogenic microorganisms and dye residues into the environment.

13- Disposal Information

This product is intended to culture enteric pathogens; once inoculated, plates must be treated as biohazardous (biological) waste.
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 medium or dye-containing waste directly to drains.
Unused/unopened product may be disposed of as general laboratory waste in accordance with local regulations,

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unless local rules require dye-containing waste to be handled separately.
Inoculated plates must be autoclaved or otherwise effectively decontaminated by a validated method before final disposal, where required by local procedures.
Dispose of contents/container in accordance with applicable local, national, and international regulations.

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 (finished product)
Special precautions: If shipping inoculated plates containing confirmed or suspected enteric pathogens (e.g., Salmonella, Shigella), applicable biological/infectious substance transport regulations (e.g., UN3373 Biological Substance, Category B, or UN2814 for Category A pathogens, as 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.
As this medium is intended for the isolation of enteric pathogens such as Salmonella and Shigella (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 in addition to this chemical safety data sheet.
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.