

# **PRODUCT INFORMATION**

Product Type: PETRI DISHES 90mm

Cat No. PD046 - SS AGAR

#### **Intended Use:**

SS Agar is recommended for isolation and differentiation of pathogenic enteric bacilli, especially Salmonella and Shigella from clinical specimens, including feces, and food samples.

### **Principles and uses:**

Differentiation of gram-negative bacilli on SS Agar is based on the fermentation of lactose and subsequent absorption of neutral red; gram negative bacilli which ferment lactose produce pink to red colonies. Lactose-non fermenters, such as Salmonella and Shigella, form transparent, colorless colonies. Bile salts, brilliant green, and citrates are selective agents which inhibit grampositive bacteria and coliforms. Sodium thiosulfate, a sulfur source, and ferric ammonium citrate, an indicator, are added to enable organisms which produce H2S to form black-centered colonies, including some strains of Salmonella. The medium contains a bile salts mixture to inhibit the growth of gram-positive organisms.

#### **Limitations:**

- 1. Organisms other than Salmonella and Shigella which grow on this medium may be differentiated by their ability to ferment lactose and form pink or red colonies.
- 2. SS Agar is not recommended for primary isolation of Shigella spp. because it is highly selective and may inhibit some strains.

#### **Formulation**

| Lactose            | 10.0 g/L  |
|--------------------|-----------|
| Meat Peptone       | 2.5 g/L   |
| Bile Salts         | 8.5 g/L   |
| Ferric Citrate     | 1.0 g/L   |
| Sodium Citrate     | 8.5 g/L   |
| Neutral Red        | 25.0 mg/L |
| Sodium Thiosulfate | 8.5 g/L   |
| Brilliant Green    | 0.33 mg/L |
| Beef Extract       | 5.0 g/L   |
| Agar               | 13.5 g/L  |
| Casein Peptone     | 2.5 g/L   |

**Storage:** 2-8 °C **Final pH:** 6.8 - 7.2

Appearance: Red-Orange, Very Slightly Opalescent

Package contents: 10 plates in a package

Shelf life: 1.5 months

**Exp. Date:** Printed on label and on the item.

Required materials not supplied: Laboratory equipment as required.

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Petri dishes if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Petri Dishes may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

If excessive moisture is observed, invert the bottom over an off-set lid and allow to air dry in order to prevent formation of a seal between the top and bottom of the plate during incubation. Storage Instructions: On receipt, store plates in the dark at 2–8 °C. Avoid freezing and overheating. Do not open until ready to use.

## **Performance Testing Results:**

GPT: inoculum 10-100 cfu

Inhibitory properties: inoculum 10000 cfu

| TEST                   | ATCC  | Incubation<br>Temp. (°C) | Incubation Cond.  | Reaction 1          |  |
|------------------------|-------|--------------------------|-------------------|---------------------|--|
|                        |       |                          |                   |                     | Colorless with black center H <sub>2</sub> S |
| Salmonella typhimurium | 14028 | 33-37 °C                 | Aerobic, 24 hours | Pass                | positive                                     |
| Shigella flexneri      | 29903 | 33-37 °C                 | Aerobic, 24 hours | Pass                | Smooth opaque colorless                      |
| Shigella sonnei        | 29930 | 33-37 °C                 | Aerobic, 24 hours | Pass                | Smooth opaque colorless                      |
| Proteus mirabilis      | 4630  | 33-37 °C                 | Aerobic, 24 hours | Pass                | Colorless, non-swarming                      |
| Escherichia coli       | 25922 | 33-37 °C                 | Aerobic, 24 hours | Partially Inhibited | Red  |
| Enterococcus faecalis  | 19433 | 33-37 °C                 | Aerobic, 24 hours | Inhibited           |  |

Implementation Date: 29/07/25

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