

# PRODUCT INFORMATION

Product Type: PETRI DISHES 90mm

**Cat No. PD072 – TSBA + DEF. SHEEP BLOOD + AMIKIN**

## Intended Use:

TSBA + 10% defibrinated sheep blood + Amikin is a selective blood agar medium designed to inhibit Gram-negative flora, enhance the growth of anaerobic and Gram-positive bacteria, and allow observation of hemolytic reactions.

## Principle and Uses:

**TSBA (Tryptic Soy Blood Agar):** Tryptic Soy Blood Agar Base No. 2 (often abbreviated as TSBA or TSA II) An enriched, nonselective base medium that supports the growth of a wide variety of fastidious and non-fastidious microorganisms and allows observation of hemolytic reactions.

**Defibrinated Sheep Blood (10%):** Enriches the medium, supports the growth of fastidious organisms, and enables visualization of hemolysis patterns (e.g., alpha, beta, gamma hemolysis).

The presence of sheep blood enables detection and differentiation of hemolytic reactions, aiding in the identification of organisms like streptococci and Clostridium perfringens. Growth factors in the medium support the recovery of fastidious anaerobes.

**Beta-hemolysis:** Complete hemolysis, resulting in a clear zone around bacterial colonies.

**Alpha-hemolysis:** Incomplete hemolysis, leading to a greenish discoloration around colonies.

**Gamma-hemolysis:** No hemolysis, with no change in the appearance of the agar around colonies.

**Amikin (Amikacin):** An aminoglycoside antibiotic added to the medium to inhibit the growth of competitive Gram-negative flora, making the medium selective for certain bacteria, particularly anaerobes and Gram-positive organisms.

## Composition

Tryptone H - 15 g/L

Soytone - 5 g/L

Sodium Chloride - 5 g/L

Agar - 15 g/L

Donor sheep blood – 100ml/L

Amikacin Sulfate Salt – 85 mg/L

**Storage:** 2-8°C

**Appearance:** Cherry red, opaque

**pH Range:** 7.1 - 7.5

**Package contents:** 10 plates in a package

**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.

**Waste Disposal**

After interpretation all plates should be destroyed by standard incineration methods.

**Performance Testing Results**

**GPT:** Inoculum 10-100 cfu.

**Inhibitory properties:** Inoculum 10000 cfu.

TEST	ATCC	Incubation Temp. (°C)	Incubation Cond	Reaction 1
<i>Bacteroides fragilis</i>	23745	33-37 °C	Anaerobic, 48 hours	Growth
<i>Clostridium perfringens</i>	13124	33-37 °C	Anaerobic, 48 hours	Growth
<i>Escherichia coli</i>	25922	33-37 °C	Anaerobic, 48 hours	Partially inhibited
<i>Proteus mirabilis</i>	4630	33-37 °C	Anaerobic, 48 hours	Partially Inhibited