

# TM 1579- BAIRD PARKER AGAR BASE (RPF) (ISO 6888-1 & 2:1999)

#### **INTENDED USE**

For isolation & enumeration of coagulase positive Staphylococci from foods & pharma products.

# PRODUCT SUMMARY AND EXPLANATION

Baird parker agar Base is recommended by the ISO Committee for the Isolation of coagulase positive Staphylococci from food and other materials. The ISO 6888-1 standard recommends adding Egg Yolk Tellurite Emulsion Supplement to Baird Parker Agar Base to make the complete medium Baird Parker Agar, used for the general count of coagulase-positive staphylococci in products intended for human or animal feed. In ISO 6888-2 standards, it is recommended to add Rabbit Plasma Fibrinogen (RPF) Supplement to Baird-Parker Agar Base, to make Rabbit Plasma Fibrinogen (RPF) Agar used for food that may be contaminated with Staphylococcus forming non-characteristic colonies in Baird-Parker Agar. In this RPF supplemented Baird Parker medium Staphylococcus colonies appear as small, black or gray, even white, surrounded by a halo of precipitation indicating the coagulase activity.

#### **COMPOSITION**

Ingredients	Gms / Ltr
Agar	13.000
Glycine	12.000
Casein enzymatic hydrolysate	10.000
Sodium pyruvate	10.000
Beef extract	5.000
Lithium chloride	5.000
Yeast extract	1.000

#### **PRINCIPLE**

Casein enzymatic hydrolysate, Beef extract are the source of carbon and nitrogen. Yeast extract provides vitamins (Bcomplex) which helps in stimulating bacterial growth. The selectivity of the medium is maintained by the addition of Lithium chloride and Potassium Tellurite solution. Both are helpful in suppressing the growth of other organism except Staphylococci sp. Glycine and Sodium pyruvate stimulate the growth of Staphylococci. Staphylococci that contain lecithinase break down the egg yolk and form clear zones around the colonies. Black colonies are formed due to reduction of the Potassium tellurite to tellurium.

## **INSTRUCTION FOR USE**

- Dissolve 5.6 grams in 90ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Aseptically add one vial of the RPF Supplement (TS 176) reconstituted in 10 ml of sterile distilled water to 90 ml of Baird Parker Agar Base, or 5 ml of Tellurite Egg Yolk Emulsion (TS 001) to 100 ml of Baird Parker Agar Base.
- Mix well and pour into sterile Petri plates.

## **QUALITY CONTROL SPECIFICATIONS**

Appearance of Dehydrated powder

: Cream to yellow, homogeneous free flowing powder













## Appearance of Prepared medium

Basal medium : Yellow colored, clear to slightly opalescent gel

After addition of Egg Yolk emulsion and Tellurite emulsion : Yellow coloured, Opaque gel

pH (at 25°C) : 7.2± 0.2

## **INTERPRETATION**

Cultural characteristics observed after incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Lecithinase activity	Incubation Temperature	Incubation Period
Staphylococcus aureus	25923	50-100	Luxuriant	>=50%	Grey- black colonies	Positive, opaque zone around the colony	35-37°C	24-48 Hours
Staphylococcus aureus	6538	50-100	Luxuriant	>=50%	Grey- black colonies	Positive, opaque zone around the colony	35-37°C	24-48 Hours
Proteus mirabilis	25933	50-100	Good- Luxuriant	>=50%	Brown- Black	Negative	35-37°C	24-48 Hours
Micrococcus Iuteus	10240	50-100	Poor- Good	30-40%	Shades of brown- black	Negative	35-37°C	24-48 Hours
Staphylococcus epidermidis	10240	50-100	Poor- Good	30-40%	Black	Negative	35-37°C	24-48 Hours
Escherichia coli	25922	50-100	None- Poor	0-10%	Large brown black	Negative	35-37°C	24-48 Hours
Escherichia coli	8739	50-100	None- Poor	0-10%	Large brown black	Negative	35-37°C	24-48 Hours

## **PACKAGING**

In 500 gm packaging size.

#### **STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use, if powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

## **DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

# **REFERENCES**

1. Baird-Parker. I App. Bact. 25:12. (1962).







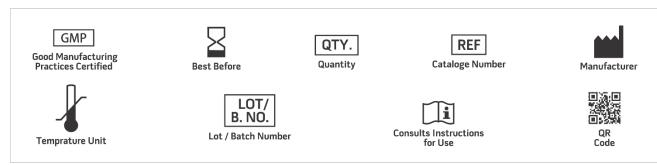






# **PRODUCT DATA SHEET**

- 2. Sharp, Neave and Reider. J. App. Bact. 28:390. (1962).
- Baird-Parker. J. Ann. Micromiol. 30:409. (1963). 3.
- 4. Baird-Parker and Devenport J. App. Bact. 28:390. (1965).
- 5. J. AOAC. 54:728. (1971).
- European Pharmacopoeia 6th Ed. (2007).



**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

\*For Lab Use Only Revision: 8th July 2020







