

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 (B-complex) 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.
- Cool to 50°C.
- 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
<i>Staphylococcus aureus</i>	25923	50-100	Luxuriant	>=50%	Grey-black colonies	Positive, opaque zone around the colony	35-37°C	24-48 Hours
<i>Staphylococcus aureus</i>	6538	50-100	Luxuriant	>=50%	Grey-black colonies	Positive, opaque zone around the colony	35-37°C	24-48 Hours
<i>Proteus mirabilis</i>	25933	50-100	Good-Luxuriant	>=50%	Brown-Black	Negative	35-37°C	24-48 Hours
<i>Micrococcus luteus</i>	10240	50-100	Poor-Good	30-40%	Shades of brown-black	Negative	35-37°C	24-48 Hours
<i>Staphylococcus epidermidis</i>	10240	50-100	Poor-Good	30-40%	Black	Negative	35-37°C	24-48 Hours
<i>Escherichia coli</i>	25922	50-100	None-Poor	0-10%	Large brown black	Negative	35-37°C	24-48 Hours
<i>Escherichia coli</i>	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).



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

 GMP Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

***For Lab Use Only**

Revision: 8th July 2020