

Product Data Sheet

BAIRD PARKER AGAR BASE (IS: 5887 (Part II) 1976, reaffirmed 2005)

Product No. GB-DCM-00081-1A

INTENDED USE

For isolation and enumeration of coagulase positive Staphylococci from food and other products.

PRODUCT SUMMARY

Baird parker agar Base is recommended for the isolation and enumeration of Staphylococci in food and other material. It was developed by Baird Parker from the Tellurite-glycine formulation of Zebovitz et al. BIS has recommended this medium with an increased amount of sodium pyruvate, for isolation of Staphylococcus aureus.

Product Specifications

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

• 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.



Note: Lithium chloride is harmful. Avoid bodily contact and inhalation of vapours. On contact with skin wash with plenty of water immediately.

PRINCIPLE

Casein enzymatic hydrolysate, Beef extract are the source of carbon and nitrogen. Yeast extract provides vitamins (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.

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) : 7.0 ± 0.2

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.

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 luteus 10240	1024	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

This product is for research use only.