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ProductInformation

BAIRD PARKER AGAR BASE

Product Number **B 1051**

Product Description
Baird Parker Agar Base with supplements is recommended for the isolation and enumeration of coagulase-positive *Staphylococci* from food. This medium was developed by Baird Parker from the Tellurite-glycine formulation of Zebovitz. Sodium pyruvate protects injured cells and helps recovery. Lithium chloride and potassium tellurite inhibit most of the contaminating microflora except *Staphlococcus aureus.* With the addition of egg yolk, the medium becomes yellow and opaque. Proteolytic bacteria produce a clear zone around the colony in egg yolk containing media. A clear zone and grey-black colonies on this medium are indictors for coagulase-positive *Staphylococci.* Upon further incubation, an opaque zone from lipolytic activity can develop around colonies.

The complete medium has been recommended by the USP for use in the Microbial Limit Test[7]. Recently the ISO Committee has also recommended this medium for isolation and enumeration of *Staphylococci*[8]. However, identity of *S. aureus* isolated on complete Baird–Parker Agar must be confirmed with a coagulase reaction. Smith and Baird-Parker[9] found that the addition of 50 mg/L Sulphamethazine in the medium suppresses the growth and swarming of *Proteus* species.

Components

Item	G/L
Casein Enzymic Hydrolysate	10.00
Beef Extract	5.00
Yeast Extract	1.00
Glycine	12.00
Sodium Pyruvate	10.00
Lithium Chloride	5.00
Agar	20.00

Final pH (at 25 °C) 7.0 ± 0.2

Precautions and Disclaimer
For laboratory use only. Not for drug, household or other uses.

Preparation Instructions
Suspend 63 grams of Baird Parker Agar Base in 950 mls of distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs. pressure (121 °C) for 15 minutes. Cool to 50 °C and aseptically add 50 mls of Egg Yolk Emulsion (E 7899) and 3 mls of sterile 3.5% Potassium Tellurite solution (P 9227) or else add 50 mls of Egg Yolk Tellurite Emulsion (E 7774).

To prevent the growth of Proteus species also add one vial of Baird-Parker Sulfa Supplement (B 2052). Mix well and pour into sterile petri plates. Note: Lithium chloride is harmful. Avoid bodily contact and inhalation of vapors. On contact with skin wash with plenty of water immediately.

Storage
Store the dehydrated medium at 24 °C.

Product Profile

Appearance	Yellow colored, homogeneous, free flowing powder.
Color and Clarity	Basal medium yields light amber colored clear to slightly opalescent gel. After the addition of Egg Yolk Tellurite Emulsion E7774 a yellow colored opaque gel forms.
Cultural Response	Cultural characteristics observed after 24-48 hours at 35 °C.

Organisms (ATCC)[11]	**Growth**	**Color of colony**	**Lecithinase**
Proteus mirabilis (25933)	good to luxuriant*	brown-black	-
Staphylococcus aureus (25923)	good to luxuriant	grey-black shiny	+
Staphylococcus epidermidis (12228)	poor to good	black	-
Micrcoccus luteus (10240)	poor to good	very small in shades of brown-black	-
Bacillus subtillis (6633)	none to poor	dark brown matt	-
Escherichia coli (25922)	none to poor	large brown black	-

***** In medium containing supplement B 2052 Proteus species show no or poor growth without swarming.

References

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