

## Baird-Parker Agar

### Use and description:

Medium used for the enumeration with confirmation of colonies of staphylococci from food. The principle of the medium relies on the ability of *Staphylococcus aureus* to reduce tellurite (black colonies), to provoke proteolysis of egg yolk (clear halo around colonies), and to render the proteolysis zone opaque (lipase activity).

Potassium Tellurite and Lithium Chloride selectively suppresses the growth of most bacteria but allows the growth of *Staphylococcus aureus*.

### Composition per liter:

Peptones .....	15.5 g
Beef extract .....	5.0 g
Yeast Extract .....	1.0g
Sodium Pyruvate .....	10.0 g
Lithium Chloride .....	5.0g
Agar .....	17.0g
Glycine .....	12.0g

**Final pH of the ready to use medium:** 7.0±0.2 at 25.0 °C

### Medium preparation:

Add 65,5 grams of dehydrated medium in a liter of distilled water. Heat with repeated stirring and boil for one minute to dissolve completely. Autoclave at 121.0 °C for 15 minutes. After cooling to 45-50.0 °C add 50ml of sterile Egg yolk tellurite emulsion (S0203).

### Quality specifications:

1. The powder is homogeneous, free flowing and light beige.
2. Visually the prepared medium is clear to slightly hazy and light amber. The prepared enriched medium is canary yellow and opaque.
3. Expected cultural response after 18-24 hours at 37.0 °C

### Microbiological response:

<b>Organism</b>	<b>Growth</b>	<b>Appearance</b>
<i>Proteus mirabilis</i> ATCC 12453	Good	Brown
<i>Escherichia coli</i> ATCC 25922	None	
<i>Staphylococcus aureus</i> ATCC 25923	Good	Black
<i>Staphylococcus epidermidis</i> ATCC 12228	Poor to good	Black

### Storage:

Store the sealed bottle containing the dehydrated medium at 5 to 25.0 °C. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or the color has changed from the original light beige color.