CM 22127 - BAIRD PARKER AGAR BASE
(IS: 5887 (Part II) 1976, reaffirmed 2005)

INTENDED USE
Forisolationandenumeration of coagulase positive Staphylococci from food and other products.

PRODUCT SUMMARYANDEXPLANATION
Baird parkera gar Base is recommended fortheisolation 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.

COMPOSITION

Ingredients	Gms / Ltr
Agar	20.000
Glycine	12.000
Sodium pyruvate	12.000
Casein enzymatic hydrolysate	10.000
Meet 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 instimulating bacterial growth. The selectivity of the medium is maintained by the addition of Lithium chloride and PotassiumTellurite solution. Both are helpful in suppressing the growth of other organism except Staphylococci sp. GlycineandSodium pyruvate stimulate the growth of Staphylococci. Staphylococci that contain lecithinase break down theeggyolk and form clear zones around the colonies. Black colonies are formed due to reduction of the Potassium telluritetotellurium.

INSTRUCTIONFOR USE
1. Dissolve 65.00 grams in 950ml distilled water.
2. Gently heat to boiling with swirling to dissolve the medium completely.
3. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
4. Cool to 50°C and aseptically add 50 ml concentrated Egg Yolk Emulsion (TS 002) and 3 ml sterile 3.5% Potassium Tellurite solution (TS 003) or 50 ml Egg Yolk Tellurite Emulsion (TS 001).
5. 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.

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

INTERPRETATION

Culturalcharacteristics observed with added Egg Yolk emulsion(TS 002) & Potassium tellurite (TS 003), after an 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 Temp.	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	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	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

In100&500gm packaging size.

STORAGE

Dehydratedpowder, 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 powder if they show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

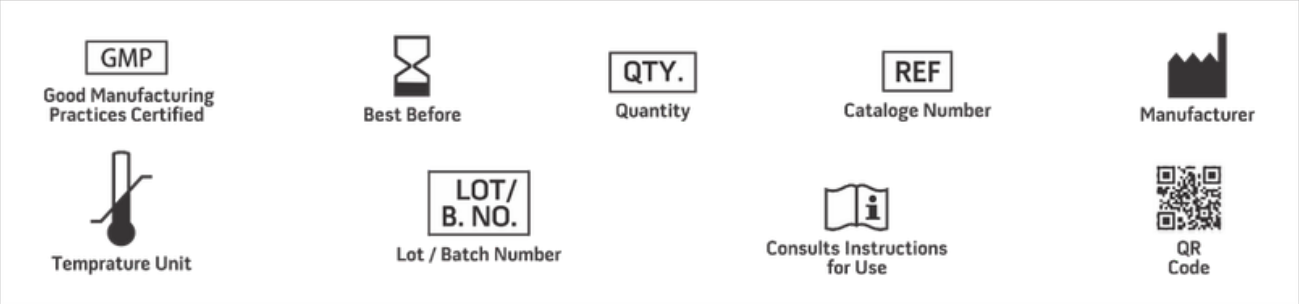
DISPOSAL

Afteruse,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. Zebovitz E., Evans J.B. and Niven C.F., 1955, J. Bact., 70:686
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. International Organization for Standardization (ISO), 1983, Draft ISO/DIS 6888
7. Bureau of Indian Standards IS : 5887 (Part II) 1976, (Second Reprint December 1994.

8. European Pharmacopoeia 6th Ed. (2007).



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