HYGİSLİDE
BAİRD PARKER AGAR/ CHROMAGAR ECC

PRINCIPLE AND INTERPRETATION:

Side1: Baird Parker Agar: A selective and diagnostic medium for the isolation and enumeration of Staphylococcus aureus in foods. Baird-Parker added sodium pyruvate, to protect damaged cells and aid their recovery and egg yolk emulsion as a diagnostic agent.

The selective agents glycine, lithium and tellurite have been carefully balanced to suppress the growth of most bacteria present in foods, without inhibiting Staphylococcus aureus. Egg yolk emulsion makes the medium yellow and opaque. Staphylococcus aureus reduces tellurite to form grey-black shiny colonies and then produces clear zones around the colonies by proteolytic action. This clear zone with typical grey-black colony is diagnostic for Staphylococcus aureus. On further incubation, most strains of Staphylococcus aureus form opaque haloes around the colonies. This is probably due to the action of a lipase. Not all strains of Staphylococcus aureus produce both reactions. Some strains of Staphylococcus saprophyticus produce both clear zones and opaque haloes but experienced workers can distinguish these from Staphylococcus aureus by the longer incubation time required·

Side2: Chromagar ECC: Chromogenic medium for the detection and enumeration of ß-glucuronidase positive E.coli and coliforms in food and water samples. Coliforms, Enterobacteriacae able to ferment lactose (lactose positive Enterobacteriacae), are bacteria present in human and warm blooded animals intestinal flora, in the soil and water. Coliforms are proof of organic, environmental or faecal contamination. Faecal contamination, due to coliforms coming from animal waste, consists mainly of Escherichia coli and thermotolerant Klebsiella. Strict regulations exist for E.coli/Coliform presence in water and food samples. This can be explained by the importance of these germs in determining water and food safety.

COMPOSITION:

Baird Parker Agar

Ingredients	Gr/Liter
Tryptone	10 gr
Meat extract B#	5 gr
Yeast extract	1 gr
Sodium pyruvate	10 gr
Glycine	12 gr
Lithium chloride	5 gr
Egg Yolk Tellurite Emulsion	50 ml
Agar	20 gr

pH: 6,8 ± 0,2

***Formula adjusted, standardized to suit performance parameters

Chromagar ECC

Ingredients	Gr/Liter
Peptone and yeast extract	8 gr
NaCl	5 gr
Chromogenic mix	4,8 gr
Agar	15 gr

pH: 7,2 ± 0,2

INSTRUCTIONS FOR USE:

Testing Fluids:

1. Mix liquid test sample.
2. Remove the paddle from the vial. Do not touch the agar surfaces.
3. Immerse the slide in the fluid to be tested for about 5- 10 seconds. Alternatively expose the slide to a spray or running fluid so that the slide surfaces are covered.
4. Both agar surfaces must be completely contacted.
5. Allow excess fluid to drain off both paddle agar surfaces.
6. Replace the Slide into the tube and twist to tighten the cap. Label the tube with the identification label supplied. Incubate the slide as directed later.

Testing Surfaces:

1. Remove the paddle from the vial. Do not touch the agar surfaces.
2. To assure an accurate area recovery, contact the paddle to 20^2cm of the surface by contacting the surface twice in separate 10^2cm areas.
3. Replace the Slide into the tube and twist to tighten the cap. Label the tube with the identification label supplied. Incubate the slide as directed later.

QUALITY CONTROL:

1.Sterility Control:
Incubation 2d at 30-35°C and 3 d at 20-25°C: NO GROWTH

2.Phsical/Chemical Control

	pH	Apperance:
Baird Parker Agar:	6,8 ± 0,2	Amber
Chromagar ECC:	7,2 ± 0,2	Amber

3.Microbiological Control: Incubate at 35±2 °C tempereature for 24-48 hours.

Side1: Baird Parker Agar

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Staphylococcus aureus ATCC 25923	10-100	Good	Black colonies, lecithinase +
Staphylococcus epidermidis ATCC 12228	10-100	Poor growth	Black colonies, lecithinase -
Bacillus subtilis ATCC 6633	100-1000	Inhibition	-
Escherichia coli ATCC 25922	100-1000	Inhibition	-

Side2: Chromagar ECC

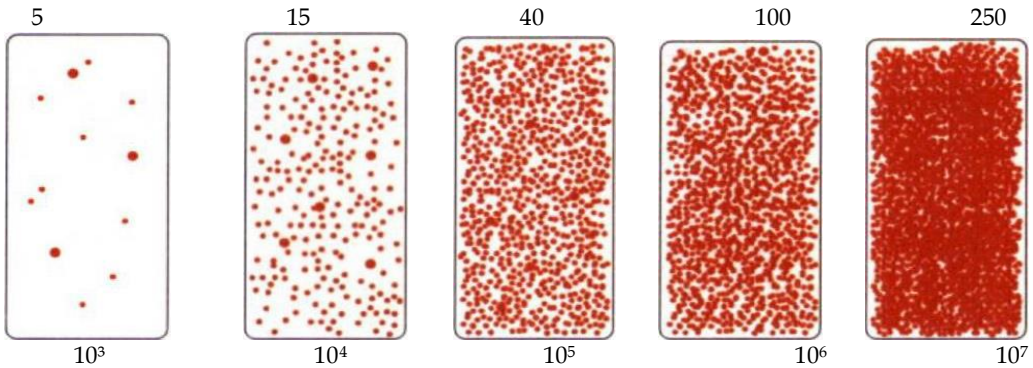
Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
E.coli ATCC 25922	10-100	Growth	Blue
Citrobacter frendui ATCC 8090	10-100	Growth	Mauve
E.cloacae ATCC 43560	10-100	Growth	Mauve
E.aerogenes ATCC 13048	10-100	Growth	Mauve
K.pneumoniae ATCC 4352	10-100	Growth	Mauve
Staphylococcus aureus ATCC 25923	100-1000	Inhibition	-
Enterococcus faecalis ATCC 25212	100-1000	Inhibition	-

INTERPRETATION OF RESULTS

Compare the slide surfaces against the comparison chart printed below. Read the result corresponding to fluids or surfaces as appropriate. Note that very high levels of organisms could lead to a confluent growth and could be recorded as a nil result. Compare against an unused slide when reading results.

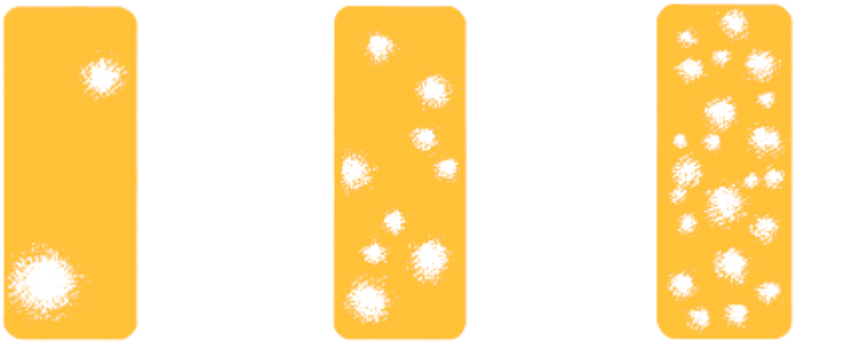
Bacteria Comparison Chart

Surfaces
CFU/cm2



Fluids
CFU/mL

Fungi Comparison Chart



\+ Slight ++ Moderate +++ Heavy

DISPOSAL:

Incubated Slides may contain active bacteria and micro-organisms. Do not open infected slides except as part of disposal procedure. Infected slides should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

STORAGE CONDITIONS AND SHELF LIFE:

Slides should be stored in 2-20 °C. Temperature fluctuations may result in condensation settling at the bottom of the vial, although this does not affect culture properties, it could reduce the shelf-life or cause the agar to separate from the plastic paddle support.

Avoid sudden temperature changes. Shield from direct sunlight. Do not allow paddles to freeze. Do not use any slides which have been inadvertently contaminated during storage and which are already showing growth of micro-organisms

Use before expiry date on the label.Do not use beyond stated expiry date.

PACKAGING:

Katalog Number: 06002
Content/Packaging: 20 Slides/Box

REFERENCES:

1. Baird-Parker A. C. (1962) J. Appl. Bact. 25. 12-19.
2. Zebovitz E., Evans J. B. and Niven C. F. (1955) J. Bact. 70. 686-689.
3. Baird-Parker A. C. (1963) J. Gen. Microbiol. 30. 409-413.
4. Shaw S., Scott M. and Cowan T. (1957) J. Gen. Microbiol. 5. 1010-1023.
5-2005 Submitted to: International Association for Food Protection Publication Date: July 15, 2005 Citation: Bailey, J.S., Cray, P.J., Berrang, M.E., Plumblee, J. 2005. Comparison of petrifilm and chromagar ecc for isolation of e. coli from chicken [abstract]. International Association for
6-2001 2001, National Institute of Industrial Technology
7-1999 Alonso J. L. et al 1999. Applied and Environmental Microbiology, 65: 3746-3749.
8-A comparative study of selective media used to detect and confirm coliforms and Escherichia coli in water samples using membrane filtration 1995 1995. Abstract by Collyer J.

Aseptic Sterile

Batch Code

Catalogue Number

Negative Controls

Positive Controls

Use by

Temperature Limitation

Do not reuse

Contains sufficient for <n> tests

Look at user manual

Manufacturer