

# HYGİSLİDE CHROMAGAR ECC/PCA

## PRINCIPLE AND INTERPRETATION:

**Side1: Chromagar ECC:** Chromogenic medium for the detection and enumeration of  $\beta$ -glucuronidase positive E.coli and coliforms in food and water samples. Coliforms, Enterobacteriaceae able to ferment lactose (lactose positive Enterobacteriaceae), 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.

**Side2: PCA:** A non-selective medium for the plate count of microorganisms in milk, other dairy products, foods, water and waste water. Plate Count Agar is equivalent to the medium recommended by APHA for the isolation of microorganisms in milk and other dairy products. Tryptone provides amino acids and other complex nitrogenous substances and yeast extract supplies Vitamin B complexes.

## COMPOSITION:

### Chromagar ECC

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

### PCA

Ingredients	Gr/Liter
Tryptone	5 gr
Yeast extract	2,5 gr
Glucose	1 gr
Agar	9 gr

pH: 7,2  $\pm$  0,2

pH: 7,1  $\pm$  0,2

\*\*\*Formula adjusted, standardized to suit performance parameters

## 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<sup>2</sup>cm of the surface by contacting the surface twice in separate 10<sup>2</sup>cm 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 2 d at 30-35°C and 3 d at 20-25°C: NO GROWTH

**2.Physical/Chemical Control**

pH

Apperance:

Chromagar ECC: 7,2 ± 0,2

Light Amber

Chromagar PCA: 7,1 ± 0,2

Amber

**3.Microbiological Control:** Incubation at a temperature of 35±2°C and observed after 24-48 hours.

**Side1: Chromagar ECC**

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
E.coli ATCC 25922	10-100	Growth	Blue
Citrobacter freundii 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	-

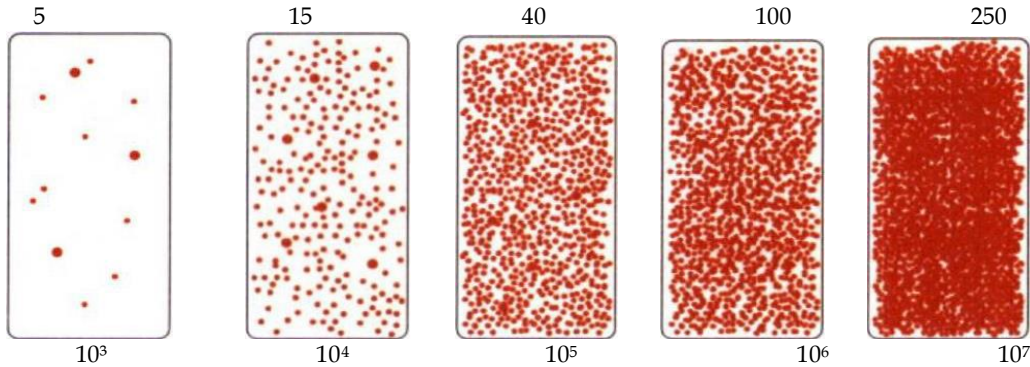
**Side2: PCA**

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Escherichia coli ATCC 25922	10-100	Good	Cream colonies
Staphylococcus aureus ATCC 6538	10-100	Good	Cream colonies
B.subtilis ATCC 6633	10-100	Good	Cream colonies

**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/cm<sup>2</sup>

**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:** 06009

**Content/Packaging:** 20 Slides/Box

### REFERENCES:

1-2001 2001, National Institute of Industrial Technology

2-1999 Alonso J. L. et al. . 1999. Applied and Environmental Microbiology, 65 : 3746-3749.

3-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.

4. American Public Health Association, Standard Methods for the Examination of Dairy Products, 14th ed., APHA Inc., Washington, D.C. (1978)

5. E.W. Frampton, et al., Comparison of  $\beta$ -glucuronidase and indole-based direct plating methods for enumeration of unstressed E. coli, J. Food Protect. 53, 933 (1990)



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