

HYGİSLİDE CHROMAGAR ECC/ DRBC

PRINCIPLE AND INTERPRETATION:

Side1: Chromagar ECC: Chromogenic medium for the detection and enumeration of β -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.

Side 2: DRBC: Dichloran Rose-Bengal Chloramphenicol Agar is a selective medium for yeasts and moulds associated with food spoilage. Inhibition of growth of bacteria and restriction of spreading of more-rapidly growing moulds aids in the isolation of slow-growing fungi by preventing their overgrowth by more-rapidly growing species. Additionally Rose Bengal is taken by yeast and moulds colonies, which allows these colonies to be easily recognized and enumerated. This medium should not be exposed to direct light as rose bengal undergoes photo-degradation leading to formation of toxic chemicals for fungi.

COMPOSITION:

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 \pm 0,2

DRBC

Ingredients	Gr/Liter
Peptone	5 gr
Glucose	10 gr
Potassium dihydrogen phosphate	1 gr
Magnesium sulphate	0,5 gr
Dichloran	0,002 gr
Rose-Bengal	0,025 gr
Chloramphenicol	0,1 gr
Agar	15 gr

pH: 5,6 \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 20²cm of the surface by contacting the surface twice in separate 10²cm 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	Amber
DRBC :	5,6 ± 0,2	Pink

3.Microbiological Control: Incubate at 35±2 °C for 24-48 hours and 25±2 °C for 48 hours-5 days

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: DRBC

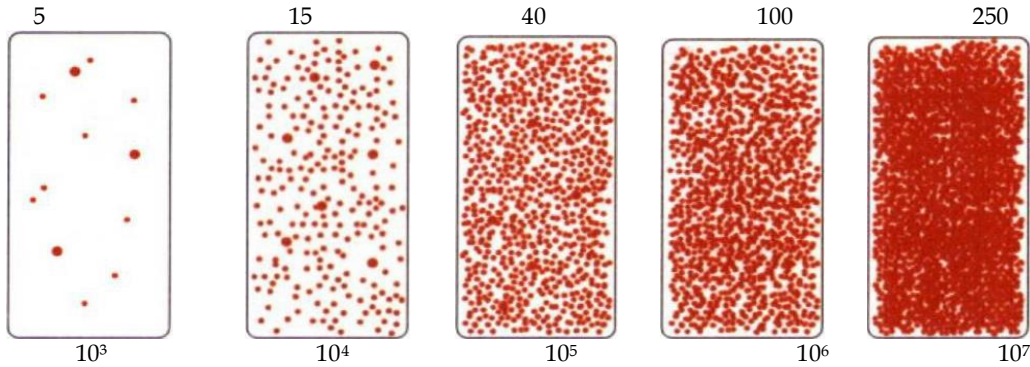
Microorganism	Inoculum (CFU)	Results
Aspergillus brasiliensis ATCC 16404	10-100	Growth
Candida albicans ATCC 10231	10-100	Growth
E. coli ATCC 25922	100-1000	Inhibition

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: 06039

Content/Packaging: 20 Slides/Box

REFERENCES:

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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., Plumlee, J. 2005. Comparison of petrifilm and chromagar ecc for isolation of e. coli from chicken [abstract]. International Association for
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10. Sharp A.N. and Jackson A.K., 1972, J. Appl. Bact., 24:175.
11. U.S. Food and Drug Administration, 1995, Bacteriological Analytical Manual, 8th Ed., AOAC International, Gaithersburg, Md.

STERILE A

Aseptic Sterile

LOT

Batch Code

REF

Catalogue Number

CONTROL -

Negative Controls

CONTROL +

Positive Controls



Use by



Temperature
Limitation



Do not reuse



Contains sufficient
for <n> tests



Look at user manual



Manufacturer