HYGISLIDE CHROMAGAR ECC/CHROMAGAR STAPH AUREUS

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, 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.

Side2: Chromagar S.aureus: Chromogenic medium for isolation and direct differentiation of Staphylococcus aureus in clinical and industrial samples.

Food Industry: Human beings are the main reservoir of S.aureus. A carrier contaminates the surrounding environment when coughing, sneezing and by touching food with a hand having a staphylococcus-infected lesion. It is often found in the environment and on food preparation surfaces and also in certain uncooked foods (dairy products, salads, sandwiches...). It is important to check the presence of S.aureus before and after the foodstuff sterilisation process.

Clinical relevance: S.aureus is the leading cause of skin and soft tissue infections and can also cause serious infections such as bloodstream infections, pneumonia, or bone and joint infections.

COMPOSITION:

Chromagar ECC

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

Chromagar S.aureus

Ingredients	Gr/Liter
Peptone and yeast extract	40 gr
Chromogenic mix	2,5 gr
Salts	25 gr
Agar	15 gr

pH: $6,9 \pm 0,2$

INSTRUCTIONS FOR USE:

Testing Fluids:

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

- 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

^{***}Formula adjusted, standardized to suit performance parameters



2.Phsical/Chemical Control

pH Apperance:

Chromagar ECC: $7,2 \pm 0,2$ Light Amber **Chromagar S. aureus** $6,9 \pm 0,2$ Light Amber

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

Side1: Chromagar ECC

Microorganism	Inoculum	Results		
	(CFU)	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	-	

Side2: Chromagar S.aureus

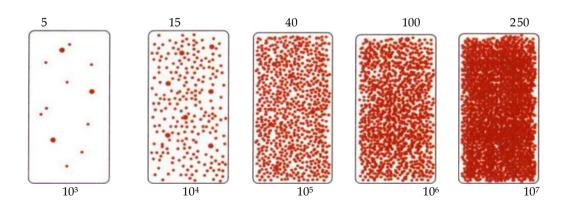
Microorganism	Inoculum	Results		
	(CFU)	Growth	Reaction	
Staphylococcus aureus ATCC 25923	10-100	Growth	Pink to mauve	
Escherichia coli ATCC 25922	100-1000	Inhibition	-	
Candida albicans ATCC 10231	100-1000	Inhibition	-	
Enterococcus faecalis ATCC 29212	100-1000	Inhibition	-	

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







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: 06005

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-Evaluacion del nuevo medio cromogenico "CHROMagar Staph aureus" para identification presuntiva de S.aureus (Poster in spanish). 2004 Cerlana P. et al. 2004. Poster presented at XVII Congreso Latino-Americano y X Congreso Argentino de Microbiologia in Buenos aeres (Argentina).

5-Evaluation of CHROMagar Staph aureus, a new chromogenic medium, for isolation and presumptive identification of Staphylococcus aureus from human clinical specimens. 2001 Gaillot O. et al. 2001. Journal of Clinical Microbiology, 38: 1587-1591. 6-Optimal detection of Staphylococcus aureus from clinical specimens using a new chromogenic medium. 2004 Samra Z., Ofir O., Bahar J. 2004. Diagnostic Microbiology and Infectious Disease, 49: 243-247.

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STERILE A	Aseptic Sterile	\subseteq	Use by	$\Box \mathbf{i}$	Look at user manual	
LOT	Batch Code	V		***	Manufactures	
REF	Catalogue Number	1	Temperature Limitation		Manufacturer	
CONTROL -	Negative Controls	(2)	Do not reuse			
CONTROL +	Positive Controls	Σ	Contains sufficient			

for <n> tests