

Contact Slide Chrom 1 ChromaticTM Coli Coliform / ChromaticTM Salmonella

Flex Dip-slide with chromogenic selective media for detection of *Escherichia coli*, other coliform bacteria and *Salmonella* spp.

DESCRIPTION

Contact Slide Chrom 1 is a ready-to-use device with two different media coated onto a plastic support used for the microbial monitoring of surfaces of sanitary importance and analysis of food and water samples.

The chromogenic and selective media allow the detection of *Salmonella* spp and the differentiation of *E. coli* from the other enterobacteria.

TYPICAL FORMULA			
<u>Chromatic™ Coli Coliform</u> Side 1 (g/l)		Chromatic TM Salmonella Side 2	(g/l)
Peptone	20.0	Peptone	7.0
Yeast Extract	3.0	Meat Extract	1.0
Sodium Chloride	5.0	Yeast Extract	3.0
Chromogenic and Selective Mix	2.7	Sodium Chloride	5.0
Agar	15.0	Chromogenic and Selective Mix	3.7
Final pH 7.2		Tween 20	3.0 ml
		Agar	15.0
		Final pH 7.5	

METHOD PRINCIPLE

<u>ChromaticTM Coli Coliform</u> is used for the detection of β -glucuronidase-positive *E. coli* and coliform bacteria. <u>ChromaticTM Salmonella</u> is used for the isolation of *Salmonella* spp including *S. typhi*.

In both media, the chromogenic and selective mix allows to identify the target organisms on the basis of the color and morphology of the colonies while inhibiting the contaminant bacterial flora.

TEST PROCEDURE

- 1. Take a slide from the refrigerator and leave it at ambient temperature for about 5 minutes
- 2. Unscrew and extract the slide from its cylindrical container. Avoid any contact with the agar surface.
- 3. <u>For surfaces monitoring</u>, flex the cap forming a 90° angle and press each side of the slide firmly against the surface to be examined for 10 seconds. Alternatively, use a swab for sampling the area, afterwards roll the swab gently over the agar surface.
 - <u>For examination of food and water</u>, hold the slide by the cap and immerse it completely in a suspension of the sample.
- 4. Reinsert the slide into its tube, screw it tight and incubate at $35 \pm 2^{\circ}$ C for 18-24 hours.

RESULTS INTERPRETATION

After incubation observe the color and the morphology of the colonies and interpret the results as indicated in the ID table.

ID Table.

Chromatic [™] Coli Coliform	Side 1	Chromatic TM Salmonella Side 2	
Microorganism	Colony color	Microorganism	Colony color
E. coli	Green	Salmonella spp (including S. Typhi and lactose fermenters)	Light mauve to mauve
Other coliform bacteria	Mauve	E. coli, Enterobacter, Klebsiella spp	Blue-green
Other bacteria (if not inhibited)	Colorless	Other bacteria (if not inhibited)	Colorless

APPEARANCE

ChromaticTM Coli Coliform **Side 1**: slightly opalescent, light amber.

ChromaticTM Salmonella **Side 2**: clear, beige.

STORAGE

2-8°C away from light, until the expiry date on the label. Eliminate if signs of deterioration or contamination are evident.

SHELF LIFE

4 months

QUALITY CONTROL

Slides are inoculated with the microbial strains indicated in the QC table.

Inoculum for productivity: 50-100 CFU Inoculum for selectivity: ≤10⁴ CFU Inoculum for specificity: 10³-10⁴ CFU

Incubation conditions: 35 ± 2 °C for 18-24 hours.

QC Table.

Microorganism		Growth on Side 1	Growth on Side 2
Escherichia coli	ATCC® 25922	Good, green colonies	Good, blue-green colonies
Salmonella typhimurium	ATCC® 14028	Good, colorless colonies	Good, mauve colonies
Klebsiella pneumoniae	ATCC® 13883	Good , mauve colonies	Good, blue-green colonies
Enterobacter cloacae	ATCC® 23355	Good, mauve colonies	Good, blue-green colonies
Proteus mirabilis	ATCC® 25923	Good, colorless colonies	Partially to completely inhibited, colorless colonies
Pseudomonas aeruginosa	ATCC® 27853	Good, colorless colonies	Partially to completely inhibited, colorless
Staphylococcus aureus	ATCC® 25923	Partially to completely inhibited, colorless colonies	Inhibited
Enterococcus faecalis	ATCC® 19433	Inhibited	Inhibited

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product must be used by properly trained operators only.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulation in force.

BIBLIOGRAPHY

- Weissman, S (1994) Comparison of enumeration of E. coli on CHROMagar E. coli and MPN methods
- Alonso J.L. et al (1996) Quantitative determination of Escherichia coli in water using CHROMagar E.coli. Journal of Microbiological Methods, 25:309-315.
- Bopp, Brenner, Wells and Strockbine (1999) In Murray, Baron, Pfaller, Tenover and Yolken (ed.). Manual of clinical microbiology, 7th ed American Society for Microbiology, Washington, DC.
- D'Aoust, Mauer and Bailey (2001) In Doyle, Beuchat, and Montville (ed.) Food microbiology: fundamentals and frontiers, 2nd ed. American Society for Microbiology, Washington, DC.
- ISO 18593:2018. Microbiology of the food chain Horizontal method for surface sampling.

PRESENTATION	Category	Packaging	Ref.
Contact Slide Chrom 1	Contact Slide	20 slides	525292
Contact Slide Chrom 1	Contact Slide	120 slides	53529

TABLE OF SYMBOLS





LIOFILCHEM® s.r.l.