



## Contact Slide Chrom 2

### Chromatic™ Coli Coliform / Plate Count Agar + TTC + Neutralizing

Flex Dip-slide with a chromogenic selective medium for detection of *E. coli* and coliforms and a non selective medium for total bacterial count.

#### DESCRIPTION

Contact Slide Chrom 2 is a ready-to-use device with two media solidified 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 medium allows the detection of *E. coli* and the differentiation from the other enterobacteria. The other medium is used for enumeration of bacteria while inactivating disinfectants.

#### TYPICAL FORMULA

Chromatic™ Coli Coliform <b>Side 1</b>	(g/l)	Plate Count Agar + TTC + Neutralizing <b>Side 2</b>	(g/l)
Peptone	20.0	Enzymatic Digest of Casein	5.0
Yeast Extract	3.0	Yeast Extract	2.5
Sodium Chloride	5.0	Glucose	1.0
Chromogenic and Selective Mix	2.7	Triphenyl Tetrazolium Chloride	0.1
Agar	15.0	Neutralizing	*
Final pH 7.2		Agar	15.0
		Final pH 7.0	

\*Histidine, 1.0 Lecithin, 0.7 Tween 80, 5.0 Sodium Thiosulfate, 0.5

#### METHOD PRINCIPLE

**Chromatic™ Coli Coliform** is used for the detection of  $\beta$ -glucuronidase-positive *E. coli* and coliform bacteria. Chromogenic and selective mix allows to identify microorganisms on the basis of the color and morphology of the colonies while inhibiting most of Gram-positive bacteria.

**Plate Count Agar + TTC + Neutralizing** is used for total bacterial count and hygiene monitoring on surfaces even in the presence of residues of disinfectants. Triphenyl tetrazolium chloride (TTC) is a redox indicator of bacterial growth.

#### 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. For surfaces monitoring, flex the cap forming a 90° angle and push for 10 seconds the slide on the surface to be examined.  
For examination of food and water, 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 ± 2°C for 18-24 hours.

#### RESULTS INTERPRETATION

After incubation observe the color and the morphology of the colonies growth on Chromatic™ Coli Coliform (**Side 1**) and interpret the results as indicated in the ID table.

##### ID Table

Microorganism	Typical colony color (Side 1)
<i>E. coli</i>	Green
Other coliform bacteria	Mauve
Other bacteria (if not inhibited)	Colorless

Count all the colonies on Plate Count Agar + TTC + Neutralizing (**Side 2**) and report as CFU/ml of sample allowing for dilution factors.

#### APPEARANCE

Slightly opalescent, light amber in both sides.

#### STORAGE AND TRANSPORT CONDITIONS

2-8°C away from light, until the expiry date on the label. However, our stability studies have shown that the transport at 18-25°C for 4 days, or at 35-39°C for 48 hours, does not alter in any way the performance of the product. 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: 10<sup>4</sup>-10<sup>6</sup> CFU

Inoculum for specificity: 10<sup>3</sup>-10<sup>4</sup> CFU

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

#### QC Table.

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

#### 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 Tenover (ed.). Manual of clinical microbiology, 7<sup>th</sup> ed American Society for Microbiology, Washington, DC.
- D'Aoust, Mauer and Bailey (2001) In Doyle, Beuchat, and Montville (ed.) Food microbiology: fundamentals and frontiers, 2<sup>nd</sup> ed. American Society for Microbiology, Washington, DC.
- ISO 18593 (2004). Microbiology of food and animal feeding stuffs- Horizontal method for sampling techniques from surfaces using contact plates and swabs.
- ISO 4833 (2003) Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of microorganisms – Colony count technique at 30°C.

PRESENTATION	Packaging	Ref.
Contact Slide Chrom 2	20 slides	525392
Contact Slide Chrom 2	120 slides	53539

#### TABLE OF SYMBOLS

<b>LOT</b> Batch code	 Keep away from sunlight	 Manufacturer	 Use by	 Fragile, handle with care
<b>REF</b> Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult Instruction For Use	 Do not reuse



**LIOFILCHEM® s.r.l.**

Via Scozia zona ind.le, 64026 Roseto degli Abruzzi (Te) Italy  
Tel. +39 0858930745 Fax +39 0858930330 www.liofilchem.net liofilchem@liofilchem.net