



Contact Slide Chrom 2

Instructions For Use

Chromatic Coli Coliform / PCA + 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 Side 1 | (g/l) | Plate Count Agar + TTC + Neutralizing Side 2 | (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 β -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.

PCA + 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 liquids, hold the slide by the cap and immerse it completely into the test fluid.
4. Reinsert the slide into its tube, screw it tight and incubate at 35 ± 2°C for 24-48 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 |

* β -glucuronidase-negative *E. coli* strains, such as *E. coli* O157, are colourless on this medium.

Count all the colonies on Plate Count Agar + TTC + Neutralizing (**Side 2**) and report as the number of colony-forming units (CFU) per sampled surface or CFU/ml for liquids.

APPEARANCE

Slightly opalescent, light amber on both sides.

STORAGE

Store at 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: 10⁴-10⁶ CFUInoculum for specificity: 10³-10⁴ CFU

Incubation conditions: 35 ± 2°C for 24-48 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

For professional use only. Operators must be trained and have certain experience. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

DISPOSAL OF WAIST









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

BIBLIOGRAPHY

- ISO 18593:2018. Microbiology of the food chain -- Horizontal method for surface sampling.
- ISO 9308-1:2014+Amd.1:2016. Water quality – Enumeration of *Escherichia coli* and coliform bacteria – Part 1: Membrane filtration method for waters with low bacterial background flora.
- ISO 4833-2:2013. Microbiology of the food chain -- Horizontal method for the enumeration of microorganisms -- Part 2: Colony count at 30 degrees C by the surface plating technique.
- 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.
- Bopp, Brenner, Wells and Strockbine (1999) In Murray, Baron, Pfaller, Tenover and Tenover (ed.). Manual of clinical microbiology, 7th ed American Society for Microbiology, Washington, DC.
- Alonso J.L. et al (1996) Quantitative determination of *Escherichia coli* in water using CHROMagar *E.coli*. Journal of Microbiological Methods, 25:309-315.
- Weissman, S (1994) Comparison of enumeration of *E. coli* on CHROMagar *E. coli* and MPN methods

| Product | Packaging | Ref. |
|-----------------------|-----------|--------|
| Contact Slide Chrom 2 | 20 slides | 525392 |

TABLE OF SYMBOLS

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

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