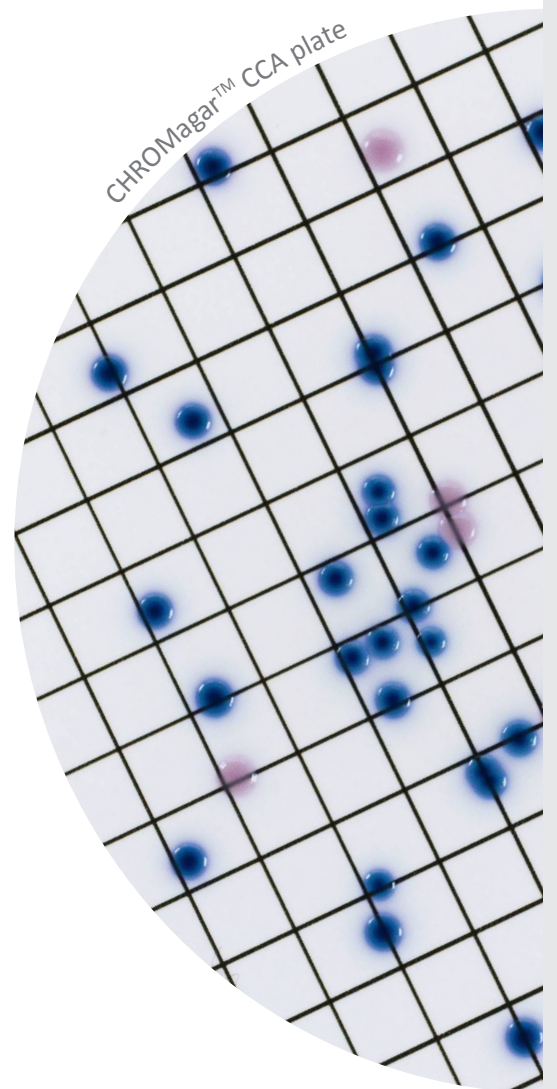


CHROMagar™ CCA



MEDIUM PURPOSE

Chromogenic Coliform Agar for the detection and enumeration of β -glucuronidase positive *E.coli* and coliforms in water with low bacterial background flora (according to the ISO 9308-1 norm).

Coliforms, Enterobacteriaceae able to ferment lactose (lactose positive Enterobacteriaceae), are bacteria present not only in human and warm blooded animals intestinal flora but also 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 samples.

This can be explained by the importance of these germs in determining drinking water safety and process efficiency of treatment, storage and distribution.

COMPOSITION

The product is composed of a single powder medium.

Product	=	Pack
Total g/L		31.5 g/L
Composition g/L		Agar 14.9 Peptone and yeast extract 3.0 NaCl 5.0 Sodium dihydrogen phosphate 2.2 Disodium hydrogen phosphate 2.7 Sodium pyruvate 1.0 Tryptophan 1.0 Sorbitol 1.0 Tergitol® 15-S-7 0.15 Chromogenic mix 0.5
Aspect		Powder Form
STORAGE		15/30°C
FINAL MEDIA pH		6.8 +/- 0.2

PREPARATION (Calculation for 1L)

Step 1

Preparation

- Disperse slowly 31.5g of powder in 1L of purified water.
- Stir until agar is thickened.
- Heat and bring to boil (100°C) while swirling or stirring regularly.

Advice : For the 100°C heating step, mixture may also be brought to a boil in a microwave oven: after initial boiling, remove from oven, stir gently, then return to oven for short repeated bursts of heating until complete fusion of the agar grains has taken place (large bubbles replacing foam).

Step 2

Pour plates

- Cool in a water bath to 45-50°C.
- Swirl or stir gently to homogenize.
- Pour medium into Petri dishes.
- Let it solidify and dry.

Storage

- Store in the dark before use.
- Prepared media plates can be kept for one day at room temperature.
- Plates can be stored for up to 15 days under refrigeration (2/8°C) if properly prepared and protected from light and dehydration.

INOCULATION

Related samples: waters with low bacterial background flora such as drinking waters, disinfected pool waters, finished waters from drinking water treatment plants or any other waters for human consumption.

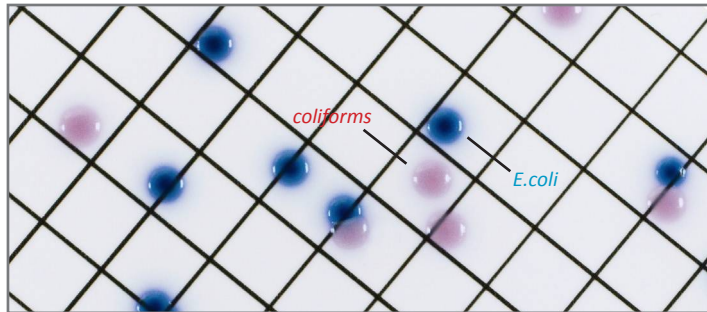
- Aseptically filter the water sample through a 0.45 μ m nitrocellulosic (or equivalent) membrane.
- Take off the membrane of the laboratory filtration system.
- Place the membrane on the CHROMagar CCA plate. If the agar plate has been refrigerated, allow to warm to room temperature before use.
- Turn upside down the plate and incubate in aerobic conditions at 37°C for 18-24h.

CHROMagar™ CCA

INTERPRETATION

Microorganism	Typical colony appearance
<i>E.coli</i>	→ metallic blue to violet
Other coliform bacteria	→ pink to red
Other gram negative bacteria	→ colourless

Typical colony appearance



The pictures shown are not contractual.

PERFORMANCE & LIMITATIONS

- Rare β-glucuronidase negative *E.coli* strains are false negative on this medium (typically O157 *E.coli*) but appear as coliform bacteria (i.e. pink colonies). *If research is focused on rare pathogenic strains such as O157 E.coli : please refer to CHROMagar O157 product.*
- Confirmation tests such as ONPG, Oxydase, Indole (urea indole broth) and Catalase can be performed directly from the plates on suspected colonies.

QUALITY CONTROL

Please perform Quality Control according to the method and criteria described in ISO 11133. Good preparation of the medium can be tested, isolating the ATCC strains below:

Microorganism	Typical colony appearance
<i>E.coli</i> ATCC® 25922 (WDCM 00013)	→ metallic blue to violet
<i>E.aerogenes</i> ATCC® 13048 (WDCM 00175)	→ pink to red
<i>E.faecalis</i> ATCC® 29212 (WDCM 00087)	→ inhibited
<i>P.aeruginosa</i> ATCC® 10145 (WDCM 00024)	→ colourless

WARNINGS

- Do not use plates if they show any evidence of contamination or any sign of deterioration.
- Do not use the product beyond its expiry date or if product shows any evidence of contamination or any sign of deterioration.
- For Laboratory use. This laboratory product should be used only by trained personnel in compliance with good laboratory practices.
- Any change or modification in the procedure may affect the results.
- Any change or modification of the required storage temperature may affect the performance of the product.
- Inappropriate storage may affect the shelf life of the product.
- Recap the bottles tightly after each preparation and keep them in a low humidity environment, protected from moisture and light.
- Collection and transport of specimen should be well handled and adapted to the particular specimen according to good laboratory practices.

DISPOSAL OF WASTE

After use, all plates and any other contaminated materials must be sterilized or disposed of by appropriate internal procedures and in accordance with local legislations. Plates can be destroyed by autoclaving at 121°C for at least 20 minutes.

REFERENCES

Please refer to our website page «Publications» for scientific publications about this particular product.

Web link: <http://www.chromagar.com/publication.php>

IFU/LABEL INDEX

- Quantity of powder sufficient for X liters of media
- Expiry date
- Required storage temperature
- Store away from humidity

Pack Size

5000 ml

250 Tests
of 20ml

=

Ordering references

EF342

Weight: 157.5g

Bulk size

=

on request

Need some Technical Documents?

Available for download on www.CHROMagar.com

- Certificate of Analysis (CoA) --> One per Lot
- Material Safety Data Sheet (MSDS)

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Tergitol® is a registered trademark of Union Carbide
NT-EXT-080 V1 / 24-Mars-15

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