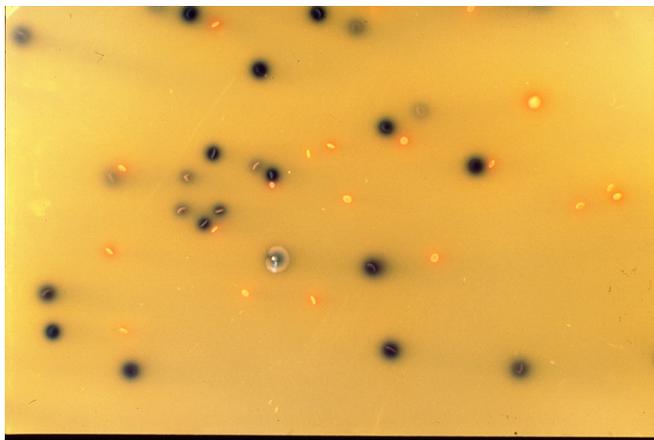


CHROMOGENIC COLIFORM AGAR
Chromogenic ready to use medium
for the simultaneous detection of coliforms and *Escherichia coli*.



Chomogenic Coliform Agar (poured plate):
E.coli with blue colonies, *E. aerogenes* with salmon colonies

TYPICAL FORMULA (g/l)

Tryptose	10.00
Tryptophan	0.10
Peptocomplex	5.00
Yeast Extract	3.00
Sodium Chloride	5.00
Bile Salts n.3	1.50
IPTG	0.10
X-GLUC	0.06
Salmon GAL	0.15
Agar	13.00

DIRECTION OF POWDERED MEDIUM

Suspend 37.9 g in 1000 ml of cold distilled water. Boil until complete dissolution. Distribute and autoclave at 121 °C for 15 minutes.
Final pH 7.0 ± 0.2

DIRECTION OF READY TO USE FLASKS

Dissolve the contents of the bottle by boiling in a temperature controlled water bath. Cool to 50 °C and distribute into sterile Petri dishes.

DESCRIPTION

Chromogenic Coliform Agar is a selective and differential medium for the simultaneous detection of *E. coli* and coliform bacteria in waters and foods.

The medium is made selective by the presence of bile salts; the differentiation between coliforms and *E. coli* is given by the presence of Salmon-GAL, a chromogenic substrate for the detection of β-galactosidase and X-GLUC, a chromogen substrate for the detection of β-glucuronidase.

Salmon-GAL is hydrolysed by coliforms releasing a salmon colour pigment; this reaction is strengthened in the medium by the presence of IPTG (isopropil-β-D-thiogalactopiranoside).

X-GLUC is hydrolysed, among enterobacteria, by *E. coli*, and by a few other strains of *Salmonella* and *Shigella* releasing a blue pigment.

The presence of tryptophan in the medium allows testing the indole directly onto the colonies by adding Kovac's Reagent, for the confirmation of *E. coli*.

TECHNIQUE

Carry out the simultaneous detection of coliform bacteria and *E. coli*, following the usual methods with surface streaking or MF techniques and with incubation at 37°C for 18-24 hours: The colonies appearance is the following:

Escherichia coli: dark blue colonies, indole positive

Coliforms (other than *E. coli*); salmon coloured colonies

Proteus: colonies with bright brown halo

Other *Enterobacteriaceae*: colourless colonies

Gram-positive bacteria are usually inhibited.

The Indole test is carried out by adding about 1ml of Kovac's Reagent to the colonies and observing the formation of a red colour within 1-2 minutes.

If the faecal coliforms detection is required, incubate the inoculated plates at 44°C for 18-24 hours.

User quality assurance

Productivity control

E. coli ATCC 25922: growth, dark blue colonies, indole positive.

Specificity control

E. aerogenes ATCC 13048: growth, salmon colonies, indole negative.

Selectivity control

E. faecalis ATCC 19433: inhibited

STORAGE

Dehydrated medium: 2-8°C.

Ready to use plates and flasks: 2-8°C.

User prepared plates: 7 days at 2 – 8°C

User prepared flasks: 1 month at 2 – 8°C

PACKAGING

4012991	Chromogenic Coliform Agar	100 g (2.6l)
4012992	Chromogenic Coliform Agar	500 g (13.2l)
497100	Chromogenic Coliform Agar	30 ready to use plates, diameter 55mm
541299	Chromogenic Coliform Agar	20 ready to use plates, diameter 90mm