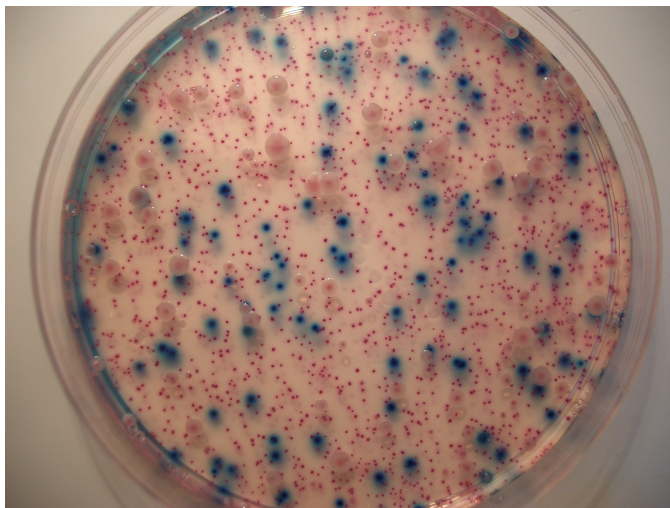


SENECA

(SIMULTANEOUS ENUMERATION ENTEROBACTERIACEAE E.COLI COLIFORMS AGAR)
Selective chromogenic medium base and supplements for the simultaneous enumeration of *E.coli* or *Enterobacteriaceae* and *Escherichia coli* or *E.coli* and coliforms in foods and animal feeding stuffs. Ready to use flasks and plates.



SENECA EE-EC Agar: *E.coli* blue colonies; *E.aerogens* red colonies

TYPICAL FORMULAS

SENECA Base (powdered medium and ready to use flasks) g/L

Peptones	15.00
Carbohydrates	2.5
Selective agents	0.5
Phosphate buffer	4.3
Chromogenic mix	0.12
Agar	15.00

SENECA EE-EC Supplement (per litre)

Antimicrobial compounds	9.0 mg
Chromogenic substrate	12,5 mg

SENECA EE-EC (ready to use plates) g/L

Peptones	15.00 g
Carbohydrates	2.5 g
Selective agents	0.5 g
Phosphate buffer	4.3 g
Chromogenic mix	0.132 g
Antimicrobial compounds	9.0 mg
Agar	15.00 g
Purified water	1000 mL

SENECA EE- CO (ready to use flasks) g/L

Peptones	15.00 g
Carbohydrates	2.5 g
Selective agents	0.5 g
Phosphate buffer	4.3 g
Chromogenic mix	0.210 g
Antimicrobial compounds	3.5 mg
Agar	15.00 g
Purified water	1000 mL

DIRECTIONS FOR DEHYDRATED MEDIUM SENECA BASE

Suspend 18,7 g in 500 mL of cold distilled water; heat to boiling stirring constantly, sterilise by autoclaving at 121 °C for 15 minutes and cool to 45-50 °C.

ENUMERATION OF *E.COLI*: use the medium base without supplements.

SIMULTANEOUS ENUMERATION OF *E.COLI* AND *ENTEROBACTERIACEAE*: reconstitute the contents of one vial of SENECA EE-EC Supplement (REF 4240023) with 1 mL of ethanol; mix well than add 1 mL of sterile distilled water. Supplement 500 mL of SENECA Base with the reconstituted vial of SENECA EE-EC Selective Supplement, mix well and pour into inoculated Petri dishes.
final pH 7,3 ± 0,2

DIRECTIONS FOR READY TO USE FLASKS**ENUMERATION OF *E.COLI***

Dissolve the contents of the bottle of SENECA Base (REF 515582S3) in a temperature controlled water batch (100 °C). Cool to 45-50 °C, mix well and pour into sterile Petri dishes

SIMULTANEOUS ENUMERATION OF *E.COLI* AND *ENTEROBACTERIACEAE*

Dissolve the contents of the bottle of SENECA Base (REF 515582S3) in a temperature controlled water batch (100 °C). Cool to 45-50 °C. Reconstitute the contents of one vial of SENECA EE-EC Supplement (REF 4240023S) with 3 mL of ethanol; mix well and then add 3 mL of sterile distilled water. Add 1 mL of reconstituted supplement to 200 mL of melted and cooled base.

SIMULTANEOUS ENUMERATION OF *E.COLI* AND *COLIFORMS*

Dissolve the contents of the bottle of SENECA EC-CO (REF 515582C3) in a temperature controlled water batch (100 °C). Cool to 45-50 °C, mix well and distribute into sterile Petri dishes

DESCRIPTION

SENECA is an improvement of a culture medium previously proposed by Biolife (Chromogenic EE-EC). **SENECA** is a chromogenic medium base that shall be supplemented with appropriate additives for the preparation of several formulations useful in food end environmental microbiology for the simultaneous enumeration of important faecal indicators:

***E.coli* β-glucuronidase positive**

or

E.coli* β-glucuronidase positive + *Enterobacteriaceae

or

***E.coli* β-glucuronidase positive + coliforms**

COMBINATIONS OF MEDIUM BASE AND SUPPLEMENTS**ENUMERATION OF *E.COLI***

Dehydrated medium

405582S SENECA Base (500g)

Ready to use medium in flasks

515582S3 SENECA Base (6x200mL)

ENUMERATION OF *E.COLI* AND *ENTEROBACTERIACEAE*

Dehydrated medium + supplement:

405582S SENECA Base (500g) +

4240023 SENECA EE-EC Supplement (10x500mL)

Ready to use medium in flasks + supplement:

515582S3 SENECA Base (6x200mL) +

4240023S SENECA EE-EC Supplement (10x1,2L)

Ready to use medium in plates:

545582S SENECA EE-EC

ENUMERATION OF *E. COLI* AND COLIFORMS

Ready to use medium in flasks:

512282C3 SENECA EC-CO

TECHNIQUE

Carry out the simultaneous enumeration of *Enterobacteriaceae* and *Escherichia coli* and Coliforms following the usual methods with poured plate technique (1mL inoculum) or the surface streaking (0,1 mL inoculum) or MF techniques and incubate at 37°C ± 1°C for 24 ± 2 hours. If no typical colonies are present after 24 h of incubation or if the colonies colours are too light or if no growth occurs, re-incubate the plates for further 24 ± 2 hours.

Enumeration of *E.coli* + *Enterobacteriaceae* (SENECA Base with SENECA EE-EC Supplement)Count as *Enterobacteriaceae* all the pink-red and blue colonies.Count as *E.coli* β-D glucuronidase positives the blue colonies.**Enumeration of *E.coli* + Coliforms (SENECA EC-CO flasks)**

Count as Coliforms all the red-violet colonies and the blue colonies.

Count as *E.coli* β-D glucuronidase positives the blue colonies.**Enumeration of *E.coli* (SENECA Base)**Count as *E.coli* β-D glucuronidase positives the blue colonies.**USER QUALITY ASSURANCE SENECA BASE + SENECA EE-EC SUPPLEMENT (37°C –24 h)**

Productivity:

E.coli ATCC 25922: blue colonies

Specificity

E.aerogenes ATCC 13048: red colonies

Selectivity:

S.aureus ATCC 25923: inhibited*P.aeruginosa* ATCC 14207: inhibited**STORAGE**

- Dehydrated medium, selective supplements, ready to use media in flasks and plates: store at 2-8°C until their expiry date
- Once reconstituted, SENECA EE-EC Supplement can be kept 24 hours at 2-8°C or 7 days if frozen in aliquots. The supplement must not undergo more than one cycle of freezing/thawing
- Poured plates prepared from the dehydrated base can be kept at 2-8°C for 15 days.

LIMITS AND PRECAUTIONS

- After reconstitution SENECA EE-EC Supplement may show a slight precipitate that doesn't give any problem on the microbiological performances of the complete medium
- Very few strains of *E.coli* (e.g. *E.coli* O157) are β-D glucuronidase negative.
- Some strains other than *E.coli* are β-D glucuronidase positive (e.g. *Salmonella*) and therefore could grow as blue colonies.
- The products here described should be used only in the Laboratory by professionally qualified operators.
- Sterilize all the inoculated materials with validated procedures.

PACKAGING

DEHYDRATED MEDIUM:

405582S2 **SENECA Base** **500 g (13.4 L)**

SUPPLEMENTS

4240023 **SENECA EE-EC Supplement** **10 vials, each for 500 mL of medium**

4240023S **SENECA EE-EC Supplement** **10 vials, each for 1,2L of medium**

READY TO USE FLASKS

515582S3 **SENECA Base** **6 x 200mL**

515582C3 **SENECA EC-CO** **6 x 200mL**

READY TO USE PLATES

545582S **SENECA EE-EC** **20 plates Ø 90 mm**