



## CEOS AESCULINE BILE AZIDE AGAR

### USES

CEOS Aesculine bile azide agar is elective medium for detection and enumeration of enterococci in water and other materials, according to ISO 7899-2.

### PRINCIPLES AND PROCEDURES

CEOS Aesculine bile azide is a selective medium for the differentiation, isolation and presumptive identification of enterococci. The ability to hydrolyze esculin is a characteristic of enterococci. Organisms positive for esculin hydrolysis, hydrolyze the glycoside esculin to esculetin and dextrose. The esculetin reacts with the Ferric ammonium citrate to form a dark brown or black colony. Ox bile does not inhibit enterococci while other Gram positive bacteria are inhibited. sodium azide inhibits Gram negative bacteria. Tryptone, peptone and yeast extract supply the nutrients essential for growth. Sodium chloride provides the osmotic balance. Bacteriological agar is the solidifying agent. The presence of intestinal enterococci, is an indicator for faecal contamination, especially when the contamination occurred a long before and the less resistant coliform bacteria, including *Escherichia coli*, may already be dead when the analysis is carried out.

### REAGENTS

#### CEOS Aesculine bile azide agar (g/l)

Tryptone	17,00
Peptone	3,00
Yeast extract	5,00
Sodium chloride	5,00
Ox bile	10,00
Esculin	1,00
Ferric ammonium citrate	0,50
Sodium azide	0,25
Agar	15,00

pH 7,1 ± 0.2

Colour: slightly opalescent, dark amber.

### PRECAUTIONS

**IVD.** Only for professional use. Do not use product if there are visible signs of microbial contamination, color change, drying, cracking or other signs of quality deterioration.



# CERTIFIKAT

Apply aseptic techniques and identified precautions against microbiological hazards throughout all procedures.

Prepared plates, bottles, sample bottles and other contaminated materials have to be sterilized in autoclave after use and before disposing.

## STORAGE AND SHELF LIFE

Products that are listed on cardboard packaging are packed in tight plastic foil, for better stability. Products must be kept at dark place and in temperature span suggested on labels, in original packaging until use. Moisture in form of fine mist or small drops on the inside of the lid, especially during and after keeping in the fridge, is acceptable and sign of medium freshness. Products can be used until expiration date (see packaging label) and incubated during recommended incubation periods.

If products from opened stack are kept on clean place where temperature is between 2-8°C, they can be used for one week (7 days). Exposure to light before and during incubation must be reduced.

## USERS QUALITY CONTROL

Inoculate representative samples with the following strains:

Microorganisms	Results
<i>E.faecalis</i> ATCC 19433	Good growth, esculin +
<i>E.faecium</i> ATCC 19434	Good growth, esculin +
<i>S.pyogenes</i> ATCC 19615	Inhibited
<i>E.coli</i> ATCC 25922	Inhibited

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

## PROCEDURE

### Materials provided

CEOS Esculin bile azide agar. Microbiologically controlled.

### Materials not provided

Additional culture medium, reagents and laboratory equipment if needed.

### Test procedure

Incubate at 35°C ± 2°C and observe after 18-24 hours. It is considered that the typical colonies that show a brown-black color in the surrounding medium give positive reactions and are recounted as intestinal enterococci.

ISO 7899-2 recommends to filter the water sample through a filter membrane (0.45 µm pore diameter), transfer the membrane onto a Slanetz Bartley Agar plate and incubate aerobically at 36 ± 2°C for 40-48 h.



# CERTIFIKAT

Confirm red-maroon-pink colonies by transferring the membrane and the colonies onto a plate of Aesculin Azide Bile Agar which has been preheated to 44°C. Incubate at 44 ± 0.5°C for 2 h.

## Results

Enterococci typically produce colonies showing a tan-black color in the surrounding medium.

## PACKAGING/AVAILABILITY

Plates ø 90 mm ready to use, 20 pcs	504010182
Plates ø 60 mm ready to use, 30 pcs	514010182
Tubes, ready to use, 20x10ml	534010182
Bottles, ready to use, 10x100ml	544010182

## MORE INFORMATIONS

For more informations contact manufacturer.

### **Certifikat d.o.o.**

Gospodarska zona 15

32000 Vukovar

Tel./fax.: +385-32-534-154

Mail: [certifikat@certifikat.hr](mailto:certifikat@certifikat.hr)

Web: [www.certifikat.hr](http://www.certifikat.hr)