

# SE (Streptococcus Enrichment) Broth

Medium used for the enrichment of *Streptococci* spp..

## • CONTENTS (Liter)

Casein Peptone	20.0 g
Yeast Extract	5.0 g
Bovine Bile	10.0 g
Sodium Chloride	5.0 g
Sodium Citrate	1.0 g
Esculin	1.0 g
Ferric Ammonium Citrate	0.5 g
Sodium Azide	0.25 g
Final pH = 7.0 ± 0.2 at 25°C.	

## • PROCEDURE

Suspend 42.75 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 20 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in tubes. If necessary, dispense the medium before autoclave.

## • INTERPRETATION

SE (Streptococcus Enrichment) Broth is a medium used for the enrichment of *Streptococci* spp.. Casein peptone is the carbon and nitrogen sources. Yeast extract provides vitamin B complex that stimulate bacterial growth. Sodium chloride maintains the osmotic balance. Bovine bile and sodium citrate inhibit gram-positive bacteria other than *Streptococci*. Organisms positive for esculin hydrolysis hydrolyze the esculin to esculetin and dextrose. The esculetin reacts with the ferric ammonium citrate to form a dark brown or black complex. Sodium azide inhibits gram-negative bacteria.

## • TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 35 - 37 °C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

### Prepared medium

Appearance: clear with no precipitate.

Color: light amber.

Incubation conditions: 35 - 37 °C / 18 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristic
<i>Enterococcus faecalis</i>	29212	50-100	good	black
<i>Escherichia coli</i>	25922	≥10 <sup>3</sup>	inhibited	-
<i>Staphylococcus aureus</i>	25923	≥10 <sup>3</sup>	inhibited	-

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

## • REFERENCES

1. Isenberg, Goldberg and Sampson, 1970, Appl. Microbiol., 20:433.
2. Rochaix, 1924, C.R. Soc. Biol., 90:771.
3. Facklam and Moody, 1970, Appl. Microbiol., 20:245.
4. MacFaddin J., 1980, Biochemical Tests for Identification of Medical Bacteria, 2nd ed., Williams and Wilkins, Baltimore.

## • PACKAGE

Cat. No : MB-S0765 SE (Streptococcus Enrichment) Broth	500 G
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