

S F MEDIUM

For the differentiation of group D enterococci
from the group D non enterococci

TYPICAL FORMULA (g/l)

Tryptone	15.000
Soy Peptone	5.00
Glucose	5.000
Dipotassium Phosphate	4.000
Monopotassium Phosphate	1.500
Sodium Azide	0.500
Sodium Chloride	5.000
Bromcresol Purple	0.032

DIRECTIONS

Suspend 36 g in 1000 ml of cold distilled water; heat to dissolve, distribute in 10 ml quantities and autoclave at 121° C for 15 minutes. With inocula greater than 1 ml for 10 ml of medium, use multiple strength medium.

Final pH 6.9 + 0.2

DESCRIPTION

S.F. Broth, prepared according to the formulation developed by Hajna and Perry, was used in the past as a selective medium for the isolation of group D streptococci from water, milk, faeces, or other specimens. The use of SF Broth in sanitary bacteriology has been replaced by more selective media recommended by current Standard Methods. S.F. Broth is now used for the differentiation of group D enterococci (*E.faecalis*, *E.faecium*) from group D non enterococci and from other *Streptococcus* species. Sodium azide in the medium inhibits the growth of Gram-negative and Gram-positive bacteria, except for group D streptococci. Glucose is included in the medium as a fermentable carbohydrate, and bromcresol purple as a pH indicator.

TECHNIQUE

Inoculate the test tubes with a pure culture of *Streptococcus*. Incubate at 35°C or 45.5°C for 24 to 48 hours. A positive reaction is indicated by turbidity and yellow reaction. A negative reaction is indicated by the lack of turbidity or no change in the colour of the liquid medium. *S.bovis*, *S.equines*, *S.avium* and *Streptococcus* spp. other than group D, give negative reactions.

USER QUALITY ASSURANCE (44°C - 24 hrs)

Productivity control

E.faecalis ATCC 29212: growth, acid reaction (yellow)

Selectivity control

S.pyogenes ATCC 19615: inhibited

Storage

Dehydrated medium: 10-30°C

User prepared tubes: up to 7 days at 2-8°C

REFERENCE

• Hajna and Perry (1943) Am. J. Public Health. 33, 550

PACKAGING

4020351	SF Medium	100 g (2.7 l)
4020352	SF Medium	500 g (13.8)