

TM 432 - STREPTOCOCCUS SELECTION AGAR (STREPTOSEL AGAR)

INTENDED USE

For selective isolation and enumeration of Streptococci including group A beta haemolytic strains.

PRODUCT SUMMARY AND EXPLANATION

Streptococcus Selection Agar is formulated as per Pike, for the selective isolation of Streptococci from various materials, especially those which are heavily contaminated with accompanying heterogenous microbial flora. Abilities of these media to recover group A beta-haemolytic Streptococci has been reported by Welch et al.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	15.000
Papaic digest of soyabean meal	5.000
Dextrose	5.000
Sodium chloride	4.000
Sodium citrate	1.000
Sodium sulphite	0.200
L-Cystine	0.200
Sodium azide	0.200
Crystal violet	0.0002
Agar	15.000

PRINCIPLE

Casein enzymic hydrolysate, papaic digest of soyabean meal, dextrose and salts in the medium provide nutrients essential for the growth of Streptococci. Sodium azide and sodium sulphite inhibit gram-negative rods while crystal violet suppresses Staphylococci. However, Streptococci are not affected by these inhibitors at these concentrations. Due to this reason, this media is useful in studies of streptococcal flora from nutritional, dental and epidemiological specimens. Growth of coliforms, *Proteus*, *Pseudomonas* and *Bacillus* species is markedly suppressed in this medium. However, some strains of Staphylococci and Pneumococci may grow in this medium. All streptococcal colonies must be confirmed for identification.

INSTRUCTION FOR USE

- Dissolve 45.6 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely, autoclaving is not required if medium is used on the same day.
- If storage is desired, sterilize by autoclaving at 118°C for 15 minutes.
- Avoid overheating.

CAUTION: Sodium azide has a tendency to form explosive metalazide with plumbing material. It is advisable to use enough water to flush off the disposable.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light to medium amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.4±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Bacillus subtilis</i>	6633	$\geq 10^3$	Inhibited	0%	35 - 37°C	18 - 24 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	$\geq 70\%$	35 - 37°C	18 - 24 Hours
<i>Escherichia coli</i>	25922	50-100	None-poor	0-10%	35 - 37°C	18 - 24 Hours
<i>Pseudomonas aeruginosa</i>	27853	$\geq 10^3$	Inhibited	0%	35 - 37°C	18 - 24 Hours
<i>Staphylococcus aureus</i>	25923	50-100	None-poor	0-10%	35 - 37°C	18 - 24 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Luxuriant	$\geq 70\%$	35 - 37°C	18 - 24 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.



