

**STREPTOCOCCUS SELECTIVE AGAR****TM 432**

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

**COMPOSITION**

Ingredients	Gms/Ltr.
Tryptone	15.00
Agar	15.00
Soya peptone	5.00
Nucleic acid	6.00
Sodium chloride	4.00
Maltose	0.25
Polymyxin B sulphate	0.024
Neomycin sulphate	0.002

**INSTRUCTIONS FOR USE**

Dissolve 45.6gms in 1000ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Do not overheat the media. Cool to 45-50°C and pour into sterile Petri plates.

**PRINCIPLE**

**STREPTOCOCCUS SELECTIVE AGAR** is used for selective isolation and enumeration of Streptococci including group A beta haemolytic strains. This medium is basically the same as Streptosel Broth to which 1.5% agar has been added. Streptococcus selective agar is designed to inhibit gram-negative bacilli and staphylococci, thereby allowing for the isolation, subculture, and identification of pathogenic streptococci, including beta-hemolytic streptococci and *S. pneumoniae*. Whereas, Soya Casein Digest Agar is also used as the basal medium. Streptococcus selective agar has organic nitrogen, particularly amino acids and long-chained peptides are supplied by the combination of Tryptone and Soya peptones. This combination renders the medium highly nutritious. Osmotic equilibrium is maintained by Sodium chloride. Maltose is the fermentable carbohydrate energy source. Sulphate when used produces H<sub>2</sub>S. Agar is used as solidifying agent. Sheep blood (5% - defibrinated) has been added to facilitate growth and to detect hemolytic activity. Selective agents are added to suppress much of the oral flora, including coliforms, Staphylococci, *Micrococcus*, *Haemophilus*, *Neisseria* species and non-haemolytic Streptococci and a certain number of Enterobacteriaceae are inhibited wholly or partially, permitting satisfactory fluorescence studies of Group A.

**Appearance:** Cream to amber colour, slightly opalescent gel (without adding blood), by adding sheep blood it should appear opaque, and cherry red in color.

**pH** (at 25°C): 7.3 ± 0.2



## PRODUCT DATA SHEET

### CULTURAL RESPONSE

Cultural characteristics observed after inoculating ( $10^3$ - $10^4$ CFU/ml), on incubating at 35°C for 24 hours.

Organism	ATCC	Inoculum (CFU/ml)	Growth
<i>Enterococcus faecalis</i>	29212	$10^3$	Good
<i>Escherichia coli</i>	23724	$10^3$	Inhibited

### REFERENCES

1. Anderson, N.L., et al. *Cumitech 3B; Quality Systems in the Clinical Microbiology Laboratory*, Coordinating ed., A.S. Weissfeld. American Society for Microbiology, Washington, D.C. (2005).
2. Isenberg, H.D. *Clinical Microbiology Procedures Handbook*, Vol. I, II & III. American Society for Microbiology, Washington, D.C.
3. *The United States Pharmacopeia*, XXII, (1990).