

**GTC AGAR BASE****TM 1190**

For cultivation of Enterococci from food within 18 hours

**Composition**

Ingredients	Gms/Ltr.
Agar	15.00
Casein enzymatic hydrolysate	15.00
Papaic digest of soyabean meal	5.00
Sodium chloride	5.00
Monopotassium phosphate	5.00
Dextrose	1.00
Esculin	1.00
Polysorbate 80	0.75
Ferric citrate	0.50
Thalious acetate	0.50

\* Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight.

**Instructions for Use**

Dissolve 48.75gms in 1000ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving at 15 psi (at 121°C) for 15 minutes. Cool to 40 - 45°C and aseptically add rehydrated contents of 1 vial of GTC Supplement (TS 109) and 10 ml of sterile 10% Sodium Bicarbonate Solution (TS 108) just before use and dispense into sterile Petri plates.

**Appearance:** Light yellow colour, clear to slightly opalescent gel with slight bluish tinge

**pH (at 25°C):** 7.3 ± 0.2

**Principle**

**GTC AGAR BASE** is used for cultivation of Enterococci from food within 18 hours. *Enterococci* are gram-positive cocci causing a multitude of infections in humans. "Hartmann and Donnelly" described this medium. . Medium composed of Agar as solidifying agent. Papaic digest of animal tissue and Casein enzymatic hydrolysate that acts as source of nitrogen, amino acids and other mineral nutrients for the growth of bacteria. Sodium chloride maintains the osmotic equilibrium of the medium. Dextrose acts as a source of carbon. Streptococci hydrolyze esculin to esculetin and dextrose. Esculetin and ferric ammonium citrate forms dark brown to black complex, imparting dark brown colour to the colony. Monopotassium phosphate, Thalious acetate and Polysorbate 80 stimulates the growth of *Streptococci* (group D).

**Interpretation**

Cultural characteristics observed after inoculating (10<sup>3</sup> CFU/ml), on incubation at 35 - 37°C for 18 – 24 hours.

## PRODUCT DATA SHEET

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth	Esculin hydrolysis
<i>Enterococcus faecalis</i>	29212	10 <sup>3</sup>	Luxuriant	Positive reaction, black zone around the colony
<i>Escherichia coli</i>	25922	10 <sup>3</sup>	Inhibited	---

### References

1. Black W. A. and Buskirk F. Y., 1973, J. Clin. Pathol., 26:154.
2. Donnelly L. S. and Hartman P. A., 1978, App. Environ. Microbiol., 35 :576-581.
3. Efthymion C. J., and Joseph S. W., 1974, Appl. Microbiol., 28: 411.
4. Ostrolenk M. and Hunter A. C., 1946, J. Bacteriol., 51:735. 5. Winter C. E., and Sandholzer L. A., 1946, J. Bacteriol., 51:588.