Tryptose Cycloserine Dextrose Agar Base

M1233

Tryptose Cycloserine Dextrose agar Base is recommended for the isolation of mesophilic spore forming anaerobes in food spoilage.

Composition**

Ingredients	Gms / Litre
Tryptose	15.000
Papaic digest of soyabean meal	5.000
Yeast extract	5.000
Ferric ammonium citrate	1.000
Agar	20.000
Final pH (at 25°C)	7.6±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 23.0 grams in 500 ml. distilled water. If desired, add 0.5 to 1.0% dextrose. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 10 minutes. Cool to 50°C and aseptically add one vial of T.S.C. Supplement (FD014). Mix well and pour into sterile Petri plates.

Principle And Interpretation

Tryptose Cycloserine Dextrose Agar Base is used for isolation of mesophilic spore forming anaerobes in food spoilage (1). Tryptose cycloserine dextrose agar base has been effectively used as selective media for the isolation and enumeration of mesophilic anaerobic spore formers from environmental samples collected from cannery plant surveys (2).

Tryptose, papaic digest of soyabean meal, yeast extract provide nitrogenous compounds, carbon, vitamin B complex and trace elements essential for *Clostridium* growth. Incorporation of D-cycloserine in this medium effectiveley inhibits growth of most Enterococci.

Quality Control

Appearance
Light yellow to light brown homogeneous free flowing powder

Gelling
Firm, comparable with 2.0% Agar gel.

Colour and Clarity of prepared medium
Light amber coloured clear to slightly opalescent gel forms in Petri plates.

Reaction
Reaction of 4.6% w/v aqueous solution at 25°C. pH : 7.6±0.2

pH
7.40-7.80

Cultural Response
M1233: Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours with added T.S.C. Supplement (FD014).

Organism	Inoculum (CFU)	Growth	Recovery
Cultural Response			
Clostridium perfringens ATCC 12924	50-100	luxuriant	>=50%
Clostridium sporogenes ATCC 11437	50-100	luxuriant	

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

Reference

1. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
2. Lake D. E., Leseniewski R. S., Anderson J. E., Graves R. R. and Bremser J. F., 1985, J. Food Prot. 48: 794.

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