Culture Medium for RWC (Disinfectant Test Broth)(RWC Medium)

M500

Culture Medium For RWC is used for determination of phenol coefficient of disinfectants using *Salmonella* Typhi as a test organism.

Composition**

Ingredients	Gms / Litre
Beef extract	20.000
Peptic digest of animal tissue	20.000
Sodium chloride	10.000
Final pH (at 25°C)	7.5±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 50 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Dispense in sterile test tubes.

Principle And Interpretation

Rideal and Walker developed phenol coefficient test in 1903 for determining the germicidal efficiency of disinfectants (1). In addition to being a satisfactory index of the germicidal value of phenol like disinfectants, the phenol coefficient is used as basis for determining the dilutions, which may safely be employed in practice. The phenol coefficient of each disinfectant was first determined by the Food and Drug Administration method, 1931 (2). Since then, there is no standard method for testing disinfectants under practical conditions. Culture Medium for RWC is used for testing disinfectants and especially for determining phenol coefficient of disinfectants using *Salmonella* Typhi.

The medium contains ingredients like beef extract and peptic digest of animal tissue, which provide necessary nutrients to the growth of Salmonella Typhi when used as test organism. Presence of sodium chloride balances the osmotic equilibrium.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium
Yellow coloured, clear solution without any precipitate.

Reaction
Reaction of 5.0% w/v aqueous solution at 25°C. pH : 7.5±0.2

pH
7.30-7.70

Cultural Response
M500: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth
Salmonella Typhi ATCC 6539	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. Rideal S. and Walker J. T. A., 1903, Examination of disinfectants, J . San. Inst., 24, 424-441

2. United States of Food and Drug Administration Methods for Testing Antiseptics and Disinfectants, Circular No.198, December, 1931.

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