Culture Medium for RWC (Disinfectant Test Broth)

Intended Use
Culture Medium for RWC (Disinfectant Test Broth) is used for determination of phenol coefficient of disinfectants using *Salmonella typhi* as a test organism.

Summary
Rideal and Walker developed phenol coefficient test in 1903 for determining the germicidal efficiency of disinfectants. 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. 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*.

Principle
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.

Formula*

Ingredients	**g/L**
Beef extract	20.0
Peptic digest of animal tissue	20.00
Sodium chloride	10.0
Final pH (at 25°C)	7.5 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2ºC-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen
Pharmaceutical samples

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 50.00 g of the powder in 1000 mL purified / distilled water.
2. Heat if necessary, to dissolve the powder completely.
3. Dispense as desired.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control
Dehydrated Appearance: Cream to yellow coloured, homogeneous, free flowing powder.
Prepared Appearance: Light yellow to amber coloured, clear to slightly opalescent solution without any precipitate.
Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 35°C-37°C for 18-24 hours.

Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism at 35°C -37°C for 18 hours.

Organism (ATCC)	Growth
Salmonella Typhi (6539)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

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.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201030190500	Dehydrated Culture Media	500 g