



PRODUCT SPECIFICATION SHEET

Cooked Meat Medium (R.C. Medium) (DM248BS)

Intended Use

Cooked Meat Medium (R.C. Medium) (DM248BS) is recommended for cultivation of aerobes and anaerobes, especially pathogenic *Clostridia* and also for the stock cultures maintenance, as per Indian Standard published by BIS.

Product Summary and Explanation

Robertson developed a cooked meat medium for use in the cultivation of certain anaerobes isolated from wounds.⁽¹⁾ The present formulation for Cooked Meat Medium is a modification of Robertson's original formula and is recommended by BIS for the detection and enumeration of bacteria responsible for food poisoning especially *Clostridium welchii*.⁽²⁾ This medium with addition of further 10% Sodium chloride is used as a salt medium for isolation of Staphylococci.⁽³⁾ It is used for cultivation and maintenance of *Clostridia* and for determining proteolytic activity of anaerobes.^(4,5) FDA has recommended a slight modification of this medium for enumeration and identification of *Clostridium perfringens* from foods.⁽⁶⁾ The medium is also useful as an enrichment broth for cultivating anaerobes that may be present in small numbers in a population and as a subculture medium for determination of proteolysis (meat digestion) and spore formation by *Clostridium* species.

Principles of the Procedure

Cooked Meat Medium (R.C. Medium) contains beef heart, the muscle protein which provides amino acids and other nutrients. The muscle tissue also provides reducing substances, particularly glutathione, which permits the growth of strict anaerobes. The sulfhydryl groups, which exert the reducing effect, are more available in denatured protein; therefore, the meat particles are cooked for use in the medium. The growth in this medium is indicated by the turbidity or bubble formation by some organisms.

Formula / Liter

Ingredients	Gms / Liter
Beef heart, infusion from	500.00
Peptic digest of animal tissue	5.00
Sodium chloride	2.50
Final pH: 7.8 ± 0.2 at 25°C	
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions

1. For Laboratory Use only.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.

Directions

1. Suspend 11.54 grams of the medium in 100 ml of distilled water.
2. Mix thoroughly and allow to stand for 15 minutes until all the particles are thoroughly wetted.
3. Autoclave at 121°C, 15 lbs pressure for 15 minutes/validated cycle.

Quality Control Specifications

Dehydrated Appearance	Brown coloured granules
Prepared Medium	Medium amber coloured clear to slightly opalescent supernatant over insoluble granules
Reaction of 11.54% solution	pH : 7.8 ± 0.2 at 25°C
Gel Strength	Not Applicable





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Expected Cultural Response: Cultural characteristics observed after an incubation at 35°C for 40 - 48 hours.

Sr. No.	Organisms	Results to be achieved	
		Inoculum (CFU)	Growth
1.	<i>Clostridium botulinum</i> ATCC 25763	50 - 100	good-luxuriant
2.	<i>Clostridium perfringens</i> ATCC 12924	50 - 100	good-luxuriant
3.	<i>Clostridium sporogenes</i> ATCC 11437	50 - 100	good-luxuriant
4.	<i>Enterococcus faecalis</i> ATCC 29212	50 - 100	good-luxuriant
5.	<i>Streptococcus pneumoniae</i> ATCC 6303	50 - 100	good-luxuriant

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

Refer to appropriate references for standard test procedures.

Results

Refer to appropriate references for interpretation of results.

Storage

Store the sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light.

Expiration

Refer to the expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure

1. Blackening and disintegration of the meat particles indicate proteolysis. For best results, medium should be used on the day it is prepared, otherwise it should be boiled or steamed for a few minutes and allowed to cool without agitation and then inoculated.
2. For identification, organisms must be in pure culture. Morphological, biochemical and/or serological tests should be performed for final identification.
3. Consult appropriate texts for detailed information and recommended procedures.

Packaging

Product Name : Cooked Meat Medium (R.C.Medium)

Product Code : DM248BS

Available Pack sizes : 100gm / 500gm

References

1. Robertson, 1916, J. Pathol. Bacteriol., 20:327.
2. Bureau of Indian Standards IS : 5887 (Part II) 1976, Second Reprint December 1994.
3. Bureau of Indian Standards IS : 5887 (Part IV) 1976.
4. Lenette and others (Eds.), 1985, Manual of Clinical Microbiology, 4th ed., ASM, Washington, D.C.





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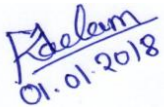
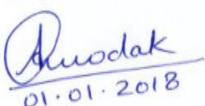

- 5. MacFaddin J.F., 1985, Media for Isolation - Cultivation - Identification - Maintenance of Medical bacteria, Vol. I, Williams & Wilkins, Baltimore.
- 6. U.S. Food and Drug Administration, 1984, Bacteriological Analytical Manual, 6th ed., AOAC, Arlington, Va.

Further Information

For further information please contact your local MICROMASTER Representative



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