

## Technical Information

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

#### Product Code: DM 1149S

**Application:** - Cooked Meat Medium (R.C.Medium) is used for cultivation of aerobes and anaerobes, especially pathogenic Clostridia and also for the maintenance of stock cultures.

#### Composition\*\*

Ingredients	Gms / Litre
Beef heart, infusion from	500.000
Peptic digest of animal tissue	5.000
Sodium chloride	2.500
Final pH ( at 25°C)	7.8±0.2

\*\*Formula adjusted, standardized to suit performance parameters

#### Principle & Interpretation

Cooked Meat Medium was developed originally by Robertson <sup>(1)</sup> for the cultivation of certain anaerobes isolated from wounds. The present formulation is also recommended by BIS for the detection and enumeration of bacteria responsible for food poisoning especially *Clostridium welchii* <sup>(2)</sup>. It is used for cultivation and maintenance of Clostridia and for determining proteolytic activity of anaerobes <sup>(4, 5)</sup>. FDA has recommended a slight modification of this medium for enumeration and identification of *Clostridium perfringens* from foods <sup>(6)</sup>. This medium with addition of further 10% Sodium chloride is used as a salt medium for isolation of Staphylococci <sup>(3)</sup>.

Cooked Meat Medium contains beef heart, the muscle protein which provides amino acids and other nutrients. It also contains glutathione a reducing substance which permits the growth of obligate anaerobes. The sulphhydryl groups which provide reducing effect are more available in denatured protein and hence the cooked meat is added in the medium. The growth in this medium is indicated by the turbidity or bubble formation by some organisms. Blackening and disintegration of the meat particles indicate proteolysis. For best results, medium should be used on the day it is prepared, otherwise prior to use it should be boiled or steamed for a few minutes and allowed to cool without agitation and then inoculated.

#### Methodology

Suspend 11.54 grams of powder media in 100 ml distilled water. Mix thoroughly and allow to stand for 15 minutes until all the particles are thoroughly wetted. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

#### Quality Control

##### Physical Appearance

Brown coloured granules

##### Colour and Clarity of prepared medium

Medium amber coloured clear to slightly opalescent supernatant over insoluble granules.

##### Reaction

Reaction of 11.54% w/v aqueous suspension at 25°C. pH : 7.8±0.2

pH range 7.60-8.00

##### Cultural Response/ characteristics

DM 1149S: Cultural characteristics observed after an incubation at 35°C for 40 - 48 hours.



Dehydrated Culture Media  
Bases / Media Supplements

Organism	Inoculum (CFU)	Growth
<i>Clostridium botulinum</i> ATCC 25763	50-100	luxuriant
<i>Clostridium perfringens</i> ATCC 12924	50-100	luxuriant
<i>Clostridium sporogenes</i> ATCC 11437	50-100	luxuriant
<i>Enterococcus faecalis</i> ATCC 29212	50-100	luxuriant
<i>Streptococcus pneumoniae</i> ATCC 6303	50-100	luxuriant

## Storage and Shelf Life

**Dried Media:** Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

**Prepared Media:** 2-8° in sealable plastic bags for 2-5 days.

## Further Reading

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.
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.

## Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specifications for identity and performance parameters.

