

## Product Data Sheet

### **REINFORCED CLOSTRIDIAL MEDIUM (RCM)**

**Product No.** GB-DCM-00283-1A

**Packing.** 500gm, 5kg, 25kg

### **INTENDED USE**

A semi-solid medium for the enumeration and cultivation of clostridia and other anaerobes occurring in food and pathological specimens. It is the basal medium for Differential Reinforced Clostridial Medium.

### **Product Description**

Reinforced Clostridial Broth is an enriched, non-selective medium formulated by Hirsch and Frinsted. This medium was developed for the isolation of spore-forming anaerobes, especially *Clostridium* spp. This medium can be used for diluting an inoculum of vegetative cells of *Clostridium perfringens* as suggested by Barnes and Ingram. It can also be used in studies of spore forming anaerobes, especially *Clostridium butyricum* in cheese or for enumeration of *Clostridium* species in tube dilution counts. Other spore forming anaerobes, Streptococci and Lactobacilli also grow in these media.

### **COMPOSITION**

<b>Ingredients</b>	<b>Gms / Ltr</b>
Peptone	10.00
Yeast Extract	13.00
Glucose	5.00
Sodium Chloride	5.00
Soluble Starch	1.00
Cysteine hydrochloride	0.50
Sodium acetate	3.00
Agar	0.50

### **PRINCIPLE**

The medium contains peptone which acts as the sources of nitrogen, vitamins and amino acids. Yeast extract provides B-complex vitamins. Glucose monohydrate is a complex carbohydrate and sodium chloride maintains the osmotic balance. Soluble starch detoxifies metabolic byproducts. Cysteine hydrochloride is added as a reducing agent and sodium acetate acts as a buffer. The small amount of agar in the broth preparation reduces the diffusion of oxygen through the fluid.



## INSTRUCTION FOR USE

- Dissolve 38 grams in 1000 ml purified/distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Dispense into tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi pressure (121° C) for 15 minutes.
- Cool the medium before use.

## QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder: Cream to yellow homogeneous free flowing powder  
 Appearance of prepared medium: Light yellow coloured clear solution in tubes  
 PH (at 25°C): 6.8±0.2

Microorganism	ATCC	Inoculum (CFU)	Growth	Incubation Temperature	Incubation Period
Clostridium sporogenes	19404	50-100	Good-Luxuriant	30 - 35°C.	24-48 Hours
Clostridium sporogenes	11437	50-100	Good-Luxuriant	30 - 35°C.	24-48 Hours
Bacteroides vulgatus	8482	50-100	Good-Luxuriant	30 - 35°C.	24-48 Hours
Bacteroides fragilis	23745	50-100	Good-Luxuriant	30 - 35°C.	24-48 Hours
Clostridium perfringens	13124	50-100	Good-Luxuriant	30 - 35°C.	24-48 Hours

## STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use, if powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

## DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

**This product is for research use only.**