**BIOMARK Laboratories-INDIA**

**www.biomarklabs.com**

**TECHNICAL SHEET**

| **B104** | **ANAEROBIC AGAR** | | | | |
|---|---|---|---|---|---|
| **Formula** | | | | | |
| **Ingredients :** | | **gms/lit.** | | | |
| Tryptone | | 20.00 | | | |
| Dextrose (Glucose) | | 10.00 | | | |
| Sodium chloride | | 5.00 | | | |
| Sodium thioglycollate | | 2.00 | | | |
| Sodium formaldehyde Sulfoxylate | | 1.00 | | | |
| Methylene blue | | 0.002 | | | |
| Agar | | 20.00 | | | |
| Final pH (at 25°C) : 7.2 ± 0.2 | | | | | |
| **Directions :** | | | | | |
| Suspend 58.0 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates. | | | | | |
| **Principle :** | | | | | |
| The medium contains sodium thioglycollate and Sodium formaldehyde Sulfoxylate that provide adequate anaerobiosis which is indicated by methylene blue present in the medium which yields blue colour to medium in presence of oxygen. Tryptone and dextrose provide essential nutrients while sodium chloride maintains osmotic equilibrium. Agar is the solidifying agent. | | | | | |
| **QC Tests – (I)Dehydrated Medium** | | | | | |
| | Colour : | Cream to light yellow | | | |
| | Appearance : | Homogeneous Free Flowing powder | | | |
| **(II)Rehydrated medium** | | | | | |
| | pH (post autoclaving/heating) : | 7.2 ± 0.2 | | | |
| | Colour (post autoclaving/heating) : | Light amber to light yellow | | | |
| | Clarity (post autoclaving/heating) : | Clear to slightly opalescent | | | |
| **(III)Q.C. Test Microbiological** | | | | | |
| | Cultural characteristics observed after 48-72 hrs. at 35-37°C when incubated anaerobically. | | | | |
| | MICROORGANISM (ATCC ) | GROWTH | | | |
| | Clostridium butyricum (9690 ) | Good-luxuriant | | | |
| | Clostridium perfringens (12914 ) | Good-luxuriant | | | |
| | Clostridium sporogenes (11437) | Good-luxuriant | | | |
| **Precautions :** | 1. For Laboratory Use. | | | | |
| | 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. | | | | |
| **Limitations :** | 1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium. | | | | |
| | 2. Clinical specimens must be obtained properly and transported to the laboratory in a suitable anaerobic transport container. | | | | |
| | 3. The microbiologist must be able to verify quality control of the medium and determine whether the environment is anaerobic. | | | | |
| | 4. The microbiologist must perform aerotolerance testing on each isolate recovered to ensure that the organism is an anaerobe. | | | | |
| | 5. Methylene blue is toxic to some anaerobic bacteria. | | | | |
| **Use :** | For the cultivation of anaerobic bacteria, especially Clostridium species and other anaerobic organisms from clinical and non-clinical samples. | | | | |
| **Storage :** | Dehydrated medium-below 30°C Prepared medium- Between 20 to 30°C. | | | | |
| **Packing :** | 500 gm. bottle | | | | |
| **Product profile:** | Reconstitution | Quantity on Preparation (500g) | pH (25°C) | Supplement | Sterilization |
| **B104** | 58.00 g/l | 8.62 L | 7.2 ± 0.2 | Nil | 121$^0$C /15 min. |