|  |  |
| --- | --- |
| **B1187** | **Lactobacilli Heteroferm Screen BROTH(MRS BROTH, Modified)** |
| **Formula** |  |  |
| **Ingredients :** | **gms/lit.**  |  |
| Dextrose 20.00Proteose peptone 10.00Yeast extract 5.00Sodium acetate 5.002-Phenylethyl alcohol 3.00Ammonium citrate 2.00Dipotassium phosphate 2.00Magnesium sulphate0.10Manganese sulphate0.05Bromocresol green 0.04Cycloheximide 0.004 |
| Final pH (at 25°C) : 4.3+ 0.2 |
| **Directions :** |
| Suspend 47.2 grams in 1000 ml distilled water containing 1 ml polysorbate 80. Mix thoroughly and dispense in tubes containing inverted Durhams tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. If necessary, adjust the pH with glacial acetic acid after sterilization. |
| **Principle :** |
| Proteose peptone and dextrose supply nitrogen, carbon and other elements essential for the growth of Lactobacilli. Polysorbate 80 a mixture of oleic esters, supplies fatty acids required by Lactobacilli. Ammonium citrate, sodium acetate, 2-phenylethyl alcohol and cycloheximide inhibit gram-negative organisms, molds and certain gram-positive bacteria. Certain yeasts are also suppressed because of presence of cycloheximide. Bromocresol green is the pH indicator, which under acidic conditions, changes colour from green to yellow. |
| **QC Tests – (I)Dehydrated Medium** |  |
|  | Colour : | Light yellow to bluish grey |
|  | Appearance : | Homogeneous Free Flowing powder |
| **(II)Rehydrated medium**  |  |
|  | pH (post autoclaving/heating) : | 4.3 ± 0.2 |
|  | Colour (post autoclaving/heating) : | Green |
|  | Clarity (post autoclaving/heating) : | Clear to slightly opalescent solution in tube |
| **(III)Q.C. Test Microbiological** |  |
|  | Cultural characteristics observed in presence of 5-10% Carbon dioxide(CO2) after an incubation at 35-37°C for upto 3 days. |
|  | MICROORGANISM (ATCC ) | GROWTH |  |  |  |  |
|  | Lactobacillus casei (9595) | Luxuriant |  |  |  |  |
|  | Lactobacillus acidophilus (4356) | Luxuriant |  |  |  |  |
|  | Lactobacillus fermentum (9338 ) | Luxuriant |  |  |  |  |
|  | Lactobacillus plantarum (8014) | Luxuriant |  |  |  |  |
| **Precautions :** | 1. For Laboratory Use. |
| 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.  |
|  | 3.Cycloheximide is very toxic. Avoid skin contact or aerosol formation and inhalation. |
| **Limitations :** | 1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium. |
| **Use :** | It is recommended for the isolation and cultivation of Lactobacillus species from salad dressings |
| **Storage :** | Dehydrated medium and prepared medium – Between 2 to 8°C. |
| **Packing :** | 500 gm. bottle |
| **Product profile:** | Reconstitution | Quantity on Preparation (500g) | pH (25°C) | Supplement | Sterilization |
| **B1187** | 47.2 g/l | 10.593lit | 4.3 ± 0.2 | polysorbate 80 | 1210C/15 min |