

**BIOMARK Laboratories-INDIA**

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**TECHNICAL SHEET**

|  |                 |   |                                |           |            |                    |
|--|-----------------|---|--------------------------------|-----------|------------|--------------------|
| <b>B1018I</b>  | <b>EC BROTH</b> |   |                                |           |            |                    |
| <b>Formula</b>   |                 |   |                                |           |            |                    |
| <b>Ingredients :</b>   |                 | <b>gms/lit.</b>   |                                |           |            |                    |
| Tryptose   |                 | 20.00   |                                |           |            |                    |
| Lactose  |                 | 5.00  |                                |           |            |                    |
| Bile Salts mixture   |                 | 1.50  |                                |           |            |                    |
| Dipotassium phosphate  |                 | 4.00  |                                |           |            |                    |
| Potassium dihydrogen phosphate   |                 | 1.50  |                                |           |            |                    |
| Sodium chloride  |                 | 5.00  |                                |           |            |                    |
| Final pH (at 25°C) :   |                 | 6.8 ± 0.2   |                                |           |            |                    |
| <b>Directions :</b>  |                 |   |                                |           |            |                    |
| Suspend 37 gms. in 1000 ml. distilled water. Heat if necessary to dissolve the medium Completely. Dispense in test tubes containing inverted Durham's tube. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Adjust the concentration of medium in accordance with sample size.   |                 |   |                                |           |            |                    |
| <b>Principle :</b>   |                 |   |                                |           |            |                    |
| Tryptose provide the nitrogen, vitamins and amino acids in EC Medium. Lactose is the carbon source. Bile Salts is the selective agent against gram positive bacteria, particularly bacilli and fecal streptococci Dipotassium Phosphate and Monopotassium Phosphate are the buffering agents. Sodium Chloride maintains the osmotic balance of the medium. |                 |   |                                |           |            |                    |
| <b>QC Tests – (I)Dehydrated Medium</b>   |                 |   |                                |           |            |                    |
| Colour :   |                 | Cream to yellow   |                                |           |            |                    |
| Appearance :   |                 | Homogeneous Free Flowing powder   |                                |           |            |                    |
| <b>(II)Rehydrated medium</b>   |                 |   |                                |           |            |                    |
| pH (post autoclaving/heating) :  |                 | 6.8 ± 0.2   |                                |           |            |                    |
| Colour (post autoclaving/heating) :  |                 | Light yellow to yellow  |                                |           |            |                    |
| Clarity (post autoclaving/heating) :   |                 | Clear   |                                |           |            |                    |
| <b>(III)Q.C. Test Microbiological</b>  |                 |   |                                |           |            |                    |
| Cultural characteristics observed after 24 hrs. at 44.5°C ± 0.2.   |                 |   |                                |           |            |                    |
| MICROORGANISM (ATCC )  |                 | GROWTH  | GAS                            |           |            |                    |
| Escherichia coli (25922)   |                 | Luxuriant   | +                              |           |            |                    |
| Klebsiella pneumoniae (13883 )   |                 | Luxuriant   | +                              |           |            |                    |
| Pseudomonas aeruginosa (27853)   |                 | Fair to good  | -                              |           |            |                    |
| Enterobacter aerogenes (13048)   |                 | Inhibited   | -                              |           |            |                    |
| Enterococcus faecalis (29212)  |                 | Inhibited   | -                              |           |            |                    |
| Bacillus subtilis (6633)   |                 | Inhibited   | -                              |           |            |                    |
| <b>Precautions :</b>   |                 | 1. For Laboratory Use.<br>2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.  |                                |           |            |                    |
| <b>Limitations :</b>   |                 | 1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.<br>2. False – negative reactions in recovering coliforms from water supplies can occur due to low pH, refrigeration and use of bactericidal or bacteriostatic agents. |                                |           |            |                    |
| <b>Use :</b>   |                 | For selective enumeration of presumptive Escherichia coli by MPN technique.   |                                |           |            |                    |
| <b>Storage :</b>   |                 | Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C.  |                                |           |            |                    |
| <b>Packing :</b>   |                 | 500 gm bottle   |                                |           |            |                    |
| <b>Product profile:</b>  |                 | Reconstitution  | Quantity on Preparation (500g) | pH (25°C) | Supplement | Sterilization      |
| <b>B1018I</b>  |                 | 37g/l   | 13.51L                         | 6.8 ± 0.2 | Nil        | 121°C / 15 minutes |

**Disclaimer:**

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