## **BIOMARK Laboratories-INDIA**

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## **TECHNICAL SHEET**

| B1044                             | Saline Lysine Decarboxylase Medium |  |  |
|-----------------------------------|------------------------------------|--|--|
| Formula                           |                                    |  |  |
| Ingredients:                      | gms/lit.                           |  |  |
| L-Lysine monohydrochloride        | 5.00                               |  |  |
| Yeast extract                     | 3.00                               |  |  |
| Dextrose                          | 1.00                               |  |  |
| Sodium chloride                   | 30.000                             |  |  |
| Bromo cresol purple               | 0.015                              |  |  |
| Final pH (at 25°C): $6.8 \pm 0.2$ |                                    |  |  |
| Directions :                      |                                    |  |  |

Suspend 39.01 grams in 1000 ml distilled water. Heat, if necessary, to dissolve the medium completely. Dispense the medium in quantities of approximately 2ml in test tube (9 mm x 180mm). Sterilize by autoclaving at 15 lbs pressure (121°C) for 10 minutes.

## **Principle:**

Yeast extract provide nitrogen compounds, growth factors essential for the growth of Vibrio parahaemolyticus. High sodium chloride content of the medium provides conditions that facilitate easy growth of Vibrio parahaemolyticus .During the initial stages of incubation, fermentation of glucose by the organisms, with acid production results in a Colour change of indicator to yellow. On further incubation, if L-Lysine is decarboxylated to cadaverine, there will be an alkaline reaction and indicator Colour will then change to purple. If Colour remains yellow, the decarboxylase reaction is negative.

Yeast extract provide essential growth nutrients. Glucose is the fermentable carbohydrate and bromocresol purple is the pH indicator.

| QC Tests – (I)De                | hydrated Medium  |               |  |               |            |               |  |  |
|---------------------------------|--|---------------|--|---------------|------------|---------------|--|--|
|                                 | Colour:  |               | Light yellow to greenish yellow                              |               |            |               |  |  |
|                                 | Appearance:  |               | Homogeneous Free Flowing powder                              |               |            |               |  |  |
| (II)Rehydrated n                | nedium   | · ·           | -  |               |            |               |  |  |
| •                               | pH (post autoclaving/heating):   |               | $6.8 \pm 0.2$  |               |            |               |  |  |
|                                 | Colour (post autoclaving/heating):   |               | Purple   |               |            |               |  |  |
|                                 | Clarity (post autoclaving/he   | Clear         |  |               |            |               |  |  |
| (III) Q.C. Test Microbiological |  |               |  |               |            |               |  |  |
|                                 | Cultural characteristics observed after 24 hours at 35 -37°C. (Inoculated tubes are overlayed with |               |  |               |            |               |  |  |
|                                 | sterile mineral oil).  |               |  |               |            |               |  |  |
|                                 | MICROORGANISM (ATCC)   |               | Lysine decarboxylation                                       |               |            |               |  |  |
|                                 | Vibrio parahaemolyticus ATC  | CC 17802      | Positive (Purple Colour with turbidity)                      |               |            |               |  |  |
| <b>Precautions:</b>             | 1. For Laboratory Use.   |               |  |               |            |               |  |  |
|                                 | 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 fa   |               |  |               |            |               |  |  |
|                                 | to grow or grow poorly on this medium.   |               |  |               |            |               |  |  |
| Use:                            | Saline Lysine Decarboxylase Medium is recommended by ISO 8914:1990 for isola                       |               |  |               |            |               |  |  |
|                                 | and identification of Vib  | rio parahaei  | <i>temolyticus</i> from food and animal feed on the basis of |               |            |               |  |  |
|                                 | lysine decarboxylation.  |               |  |               |            |               |  |  |
| Storage :                       | Dehydrated medium- below 30 ° C Prepared mediums– Between 2 to 8°C.                                |               |  |               |            |               |  |  |
| Packing:                        | 500 gm. bottle   |               |  |               |            |               |  |  |
| Product profile:                | Reconstitution   | Quantity on   |  | pH (25°C)     | Supplement | Sterilization |  |  |
|                                 |  | Preparation ( |  |               |            |               |  |  |
| B1044                           | 39 .01g/l  | 12.820 g/     | 1  | $6.8 \pm 0.2$ | NIL        | 121°C for 10  |  |  |
|                                 |  |               |  |               |            | minutes       |  |  |

Refer disclaimer Overleaf

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## Disclaimer:

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