

|  |                           |   |                                 |                               |  |                    |
|--|---------------------------|---|---------------------------------|-------------------------------|--|--------------------|
| <b>B334</b>  | <b>TINSDALE AGAR BASE</b> |   |                                 |                               |  |                    |
| <b>Formula</b>   |                           |   |                                 |                               |  |                    |
| <b>Ingredients:</b>  |                           |   | <b>gms/lit.</b>                 |                               |  |                    |
| Peptic digest of animal tissue   |                           |   | 20.00                           |                               |  |                    |
| Sodium chloride  |                           |   | 5.00                            |                               |  |                    |
| L-Cystine  |                           |   | 0.24                            |                               |  |                    |
| Sodium thiosulphate  |                           |   | 0.43                            |                               |  |                    |
| Agar   |                           |   | 15.00                           |                               |  |                    |
| Final pH (at 25°C): 7.4 ± 0.2  |                           |   |                                 |                               |  |                    |
| <b>Directions:</b>   |                           |   |                                 |                               |  |                    |
| Suspend 40.67 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 50°C and aseptically add Diphtheria Virulence Supplement (BF096, Part A and Part B). Mix well and pour into sterile Petri plates.   |                           |   |                                 |                               |  |                    |
| <b>Principle:</b>  |                           |   |                                 |                               |  |                    |
| Peptic digest of animal tissue provides nitrogenous compounds. L-cystine and sodium thiosulphate form the H <sub>2</sub> S indicator system. Potassium tellurite from the supplement inhibits all gram-negative bacteria and most of the upper respiratory tract normal flora. C. diphtheriae forms grayish black colonies surrounded by a dark brown halo while diphtheroids commonly found in the upper respiratory tract do not form such colonies. Dark brown halo around the colony is due to H <sub>2</sub> S production from cystine combining with the tellurite salt. |                           |   |                                 |                               |  |                    |
| <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) :  |                           |   | 7.4 ± 0.2                       |                               |  |                    |
| Colour (post autoclaving/heating):   |                           |   | Light amber                     |                               |  |                    |
| Clarity (post autoclaving/heating):  |                           |   | Clear to slightly opalescent    |                               |  |                    |
| <b>(III) Q.C. Test Microbiological</b>   |                           |   |                                 |                               |  |                    |
| Cultural characteristics observed after an incubation at 35-37°C for 40-48 hours with added Diphtheria Virulence Supplement (BF096, Part A and Part B).  |                           |   |                                 |                               |  |                    |
| MICROORGANISM (ATCC)   |                           | GROWTH  |                                 | COLOUR OF COLONY              |  |                    |
| Corynebacterium diphtheriae type gravis  |                           | good-luxuriant  |                                 | brown-black with halo         |  |                    |
| Corynebacterium diphtheriae type intermedius   |                           | good-luxuriant  |                                 | brown-black with halo         |  |                    |
| Corynebacterium diphtheriae type mitis   |                           | good-luxuriant  |                                 | brown-black with halo         |  |                    |
| Klebsiella pneumoniae (13883)  |                           | Inhibited   |                                 | -                             |  |                    |
| Streptococcus pyogenes (19615)   |                           | Good  |                                 | black pin point, without halo |  |                    |
| <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 fail to grow or grow poorly on this medium. |                                 |                               |  |                    |
| <b>Use:</b>  |                           | It is used for selective isolation and differentiation of Corynebacterium diphtheriae .   |                                 |                               |  |                    |
| <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>B334</b>  |                           | 40.67g/l  | 12.29L                          | 7.4 ± 0.2                     | Diphtheria Virulence Supplement (BF096, Part A and Part B) | 121°C / 15 minutes |

**Disclaimer:**

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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