

TECHNICAL SHEET

| | | |
|--|--|--------------------|
| B042 | TCBS AGAR | |
| Formula | | |
| Ingredients: | gms/lit. | |
| Proteose peptone | 10.00 | |
| Yeast extract | 5.00 | |
| Sodium thiosulphate | 10.00 | |
| Sodium citrate | 10.00 | |
| Bile | 8.00 | |
| Sucrose | 20.00 | |
| Sodium chloride | 10.00 | |
| Ferric citrate | 1.00 | |
| Bromo thymol blue | 0.040 | |
| Thymol blue | 0.040 | |
| Agar | 15.00 | |
| Final pH (at 25°C: | 8.6 ± 0.2 | |
| Directions: | | |
| Suspend 89.08 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C. Mix well and pour into sterile Petri plates. | | |
| Principle : | | |
| Proteose peptone and yeast extract provide nitrogenous compounds, vitamin B complex and other essential growth nutrients. Bile, a derivative of bile salts and sodium citrate inhibit gram-positive bacteria and coliforms. Sodium thiosulphate serves as a good source of sulphur, which in combination with ferric citrate detects the production of hydrogen sulphide. For the metabolism of Vibrios, sucrose is added as a fermentable carbohydrate. Vibrio that is able to utilize sucrose will form yellow colonies. Bromothymol blue and thymol blue are the pH indicators. | | |
| QC Tests - (I) Dehydrated Medium | | |
| Colour : | Light yellow to light tan | |
| Appearance : | Homogeneous Free Flowing powder | |
| (II) Rehydrated medium | | |
| pH (post autoclaving/heating) : | 8.6 ± 0.2 | |
| Colour (post autoclaving/heating) : | Bluish green | |
| Clarity (post autoclaving/heating) : | Clear to slightly opalescent | |
| (III) Q.C. Test Microbiological | | |
| Cultural characteristics observed after 18 – 24 hrs. at 35-37°C. | | |
| MICROORGANISM (ATCC) | GROWTH | COLOUR OF COLONIES |
| Vibrio cholerae (15748) | Good - luxuriant | Yellow |
| Vibrio fluvialis (33809) | Good - luxuriant | Yellow |
| Vibrio parahaemolyticus (17802) | Good - luxuriant | Bluish green |
| Vibrio vulnificus (29306) | Fair to good | Greenish yellow |
| Escherichia coli (25922) | Inhibited | -- |
| Proteus vulgaris (13315) | Inhibited | -- |
| Enterococcus faecalis (29212) | Inhibited | -- |
| Shigella flexneri (12022) | Inhibited | -- |
| Precautions : | <ol style="list-style-type: none"> 1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. 3. IRRITANT. Irritating to eyes, respiratory system and skin. Avoid contact with skin and eyes. Do not breathe dust. Wear suitable protective clothing. Keep container tightly closed. | |

Refer disclaimer Overleaf

TECHNICAL SHEET

| | | | | | |
|-------------------------|--|--------------------------------|-----------|------------|----------------|
| 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. Further tests are necessary for identification and confirmation of <i>Vibrio</i> spp. | | | | |
| | 3. On initial isolation, <i>V. parahaemolyticus</i> may be confused with <i>Aeromonas hydrophila</i> , <i>Plesiomonas shigelloides</i> and <i>Pseudomonas</i> species. | | | | |
| | 4. Sucrose – fermenting <i>Proteus</i> species produce yellow colonies which may resemble those of <i>Vibrio</i> . | | | | |
| | 5. TCBS is an unsatisfactory medium for oxidase testing of <i>Vibrio</i> spp. | | | | |
| | 6. A few strains of <i>V. cholerae</i> may appear green or colourless on TCBS due to delayed sucrose fermentation. | | | | |
| Use: | For selective isolation and cultivation of <i>Vibrio cholerae</i> and other enteropathogenic <i>Vibrio</i> 's causing food-poisoning | | | | |
| Storage : | Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C. | | | | |
| Packing : | 500 gm. bottle | | | | |
| Product profile: | Reconstitution | Quantity on Preparation (500g) | pH (25°C) | Supplement | Sterilization |
| B042 | 89.08 g/l | 5.612 L | 8.6 ± 0.2 | NIL | 121°C /15 min. |

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. The information contained in this publication is based on our in-house studies and market performance and is to the best of our knowledge true and accurate. BIOMARK LABORATORIES reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.