

TECHNICAL SHEET

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| B1486 | MODIFIED TERGITOL-7 AGAR BASE (TERGITOL-7 AGAR BASE, MODIFIED) | | |
| Formula | | | |
| Ingredients : | | gms/lit. | |
| Peptic digest of animal tissue | | 10.00 | |
| Yeast extract | | 6.00 | |
| Meat extract | | 5.00 | |
| Lactose | | 20.00 | |
| Sodium heptadecyl sulphate (Tergitol 7) | | 0.10 | |
| Bromo thymol blue | | 0.05 | |
| Agar | | 16.00 | |
| Final pH (at 25°C) : 7.2 ± 0.2 | | | |
| Directions : | | | |
| Suspend 57.15 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 45-50°C. Add 2.5 ml of 1% Triphenyl Tetrazolium Chloride (TTC) (BF044). Mix well and pour into sterile Petri plates. | | | |
| Principle : | | | |
| Tergitol-7 is a selective agent which inhibits gram positive organisms and minimises swarming of Proteus species enabling better coliform recovery. Lactose fermentation is observed by change in colour of bromo thymol blue, the pH indicator. Triphenyl Tetrazolium Chloride (TTC) allows earlier recognition and identification of Escherichia coli and Enterobacter aerogenes in water and food. Peptic digest of animal tissue, meat extract and yeast extract serve as sources of carbon, nitrogen and other essential nutrients including vitamin B complex. TTC is rapidly reduced by coliforms except Escherichia coli and Enterobacter aerogenes to insoluble formazan which gives red colour to the colonies. The lactose fermenters show greenish yellow colonies with yellow zones while lactose non-fermenters show red colonies surrounded by blue zones. | | | |
| QC Tests - (I) Dehydrated Medium | | | |
| Colour : | | Cream to light green | |
| Appearance : | | Homogeneous Free Flowing powder | |
| (II) Rehydrated medium | | | |
| pH (post autoclaving/heating) : | | 7.2 ± 0.2 | |
| Colour (post autoclaving/heating) : | | Green | |
| Clarity (post autoclaving/heating) : | | Clear to slightly opalescent gel | |
| (III) Q.C. Test Microbiological | | | |
| Cultural characteristics observed after an incubation at 35-37°C for 18 - 48 hours with added TTC Solution 1% (BF044). | | | |
| MICROORGANISM (ATCC) | GROWTH | COLOUR OF COLONY (ON PLAIN MEDIUM) | COLOUR OF COLONY (WITH ADDITION OF BF044) |
| Enterobacter aerogenes (13048) | Luxuriant | Yellow | reddish brown |
| Escherichia coli (25922) | Luxuriant | Yellow | yellow with red centre |
| Klebsiella pneumoniae (133883) | Luxuriant | Yellow | yellow with red centre |
| Proteus vulgaris (13315) | Good | Colourless with bluish zone | red with bluish zone |
| Pseudomonas aeruginosa (27853) | Good | colourless with bluish zone | red with bluish zone |
| Salmonella typhimurium (14028) | Luxuriant | colourless with blue zone | red with bluish zone |
| Staphylococcus aureus (25923) | Inhibited | -- | |
| Precautions : | | | |
| 1. For Laboratory Use. | | | |
| 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. | | | |

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| 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. Since the medium with TTC permits growth of coliform organisms, this fact must be taken into consideration in the isolation of Candida from specimens. | | | | |
| | 3. Reduction of TTC is an irreversible reaction that produces an insoluble formazan compound. | | | | |
| Use : | It is used for selective isolation and enumeration of coliform organisms in water by membrane filter method. The composition and performance criteria of this medium are as per the specifications laid down in ISO 9308-1:1990. | | | | |
| 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 |
| B1486 | 57.15 g/l | 8.748 L | 7.2 ± 0.2 | 1% Triphenyl Tetrazolium Chloride (TTC) (BF044) | 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 BIOMARK LABORATORIES publications.

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