

BIOMARK Laboratories-INDIA

www.biomarklabs.com

TECHNICAL SHEET

| | | | |
|--|---|---|--|
| B641 | PHENOL RED TARTARATE AGAR | | |
| Formula | | | |
| Ingredients : | | gms/lit. | |
| Peptic digest of animal tissue | | 10.00 | |
| Sodium potassium tartrate | | 10.00 | |
| Sodium chloride | | 5.00 | |
| Phenol red | | 0.024 | |
| Agar | | 15.00 | |
| Final pH (at 25°C) : 7.6± 0.2 | | | |
| Directions : | | | |
| Suspend 40.02 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense into tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubed medium to cool in an upright position. | | | |
| Principle : | | | |
| Peptic digest of animal tissue in the medium provide the essential growth nutrients like nitrogenous compounds to the organisms. Sodium potassium tartrate is used most frequently because it is easy to be utilized by the organism. Tartrate utilization (fermentation) yields an acidic reaction, which is indicated by the yellow colour formation at the bottom of the tube. Phenol red acts as the pH indicator while sodium chloride maintains the osmotic balance of the medium. | | | |
| QC Tests - (I) Dehydrated Medium | | | |
| Colour : | | Light yellow to pink | |
| Appearance : | | Homogeneous Free Flowing powder | |
| (II) Rehydrated medium | | | |
| pH (post autoclaving/heating) : | | 7.6 ± 0.2 | |
| Colour (post autoclaving/heating) : | | Red to orange red | |
| Clarity (post autoclaving/heating) : | | Clear to slightly opalescent gel forms in tubes as butts | |
| (III) Q.C. Test Microbiological | | | |
| Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours (may be upto 72 hours) | | | |
| MICROORGANISM (ATCC) | GROWTH | REACTION | |
| Escherichia coli (25922) | Luxuriant | positive reaction, yellow colour in the lower portion of the tube | |
| Salmonellas Schottmuelleri(10719) | Luxuriant | negative reaction | |
| Salmonella typhimurium (14028) | Luxuriant | Acid Production, + positive reaction, yellow colour | |
| Salmonella Typhi (6539) | Luxuriant | positive reaction, yellow colour in the lower portion of the | |
| Proteus vulgaris (13315) | Luxuriant | positive reaction, yellow colour in the lower portion of the | |
| Klebsiella pneumoniae (13883) | Luxuriant | positive reaction, yellow colour in the lower portion of the | |
| Salmonella Paratyphi A (9150) | Luxuriant | negative reaction | |
| Salmonella Paratyphi B (8739) | Luxuriant | negative reaction | |
| Vibrio parahaemolyticus (17802) | Luxuriant | positive reaction, yellow colour in the lower portion of the tube | |
| Precautions : | 1. For Laboratory Use. | | |
| | 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. | | |
| 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. The addition of some carbohydrates to the basal medium may cause an acid reaction. To restore the original pH (and colour of the medium), add 0.1 N sodium hydroxide on a drop - by - drop basis. Take care not to make the medium too alkaline, which would prevent fermentation from occurring within the usual incubation period. | | |
| | 3. When inoculating tubes, stab gently and do not use a loop. Rough stabbing or using a loop to stab may give the false appearance of gas production when mechanical splitting | | |

Rev: December 2020

Refer disclaimer Overleaf

BIOMARK Laboratories-INDIAwww.biomarklabs.com**TECHNICAL SHEET**

| | | | | | |
|-------------------------|---|--------------------------------|-----------|------------|---------------------------------|
| | of the medium is what actually occurred. | | | | |
| Use : | It is recommended for identification and differentiation of Salmonella species on the basis of tartrate utilization | | | | |
| 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 |
| B641 | 40.02 g/l | 12.49 L | 7.6± 0.2 | Nil | 121 ⁰ 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.

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.