

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

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| BH603 | MAC CONKEY AGAR | | |
| Formula | | | |
| Ingredients: | | gms/lit. | |
| Pancreatic digest of gelatin | | 17.00 | |
| Peptones (meat and casein) | | 3.00 | |
| Lactose monohydrate | | 10.00 | |
| Sodium chloride | | 5.00 | |
| Bile salts | | 1.50 | |
| Neutral red | | 0.030 | |
| Crystal violet | | 0.001 | |
| Agar | | 13.50 | |
| Final pH (at 25°C) : 7.1± 0.2 | | | |
| Directions: | | | |
| Suspend 49.53gms in 1000ml. distilled water. Heat to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.AVOID OVERHEATING. Cool to 45-50°C. Mix well before pouring into sterile Petri plates. The surface of the medium should be dry when inoculated. | | | |
| Principle: | | | |
| Pancreatic digest of gelatin and Peptone provides amino acid and other growth factors. Lactose is a carbon energy source for gram – negative lactose – fermenting bacilli. The selective action of this medium is attributed to crystal violet and bile salts, which are inhibitory to most species of gram-positive bacteria. Sodium chloride maintains the osmotic balance in the medium. | | | |
| QC Tests – (I)Dehydrated Medium | | | |
| Colour : | | Purplish cream to light beige | |
| Appearance : | | Homogeneous Free Flowing powder | |
| (II)Rehydrated medium | | | |
| pH (post autoclaving/heating) : | | 7.1 ± 0.2 | |
| Colour (post autoclaving/heating) : | | Red with purplish tinge | |
| Clarity (post autoclaving/heating) : | | Clear to slightly opalescent | |
| (III) Q.C. Test Microbiological | | | |
| Cultural characteristics observed after 18 – 24 hours at 35-37°C. | | | |
| MICROORGANISM (ATCC) | GROWTH | COLOUR OF COLONY | |
| Enterobacter aerogenes (13048) | Luxuriant | pink to red | |
| Escherichia coli (25922) | Luxuriant | pink to red with bile precipitate | |
| Escherichia coli (8739) | | pink-red with bile precipitate | |
| Escherichia coli (NTCC 9002) | Luxuriant | pink to red with bile precipitate | |
| Staphylococcus aureus (25923) | Inhibited | - | |
| Staphylococcus aureus (6538) | Inhibited | - | |
| Staphylococcus epidermidis (12228) | Inhibited | - | |
| Enterococcus faecalis (29212) | fair-good | colourless to pale pink | |
| Salmonella Typhimurium (14028) | Luxuriant | colourless | |
| Salmonella Enteritidis (13076) | Luxuriant | colourless | |
| Salmonella Paratyphi A (9150) | Luxuriant | colourless | |
| Salmonella Paratyphi B (8759) | Luxuriant | colourless | |
| Salmonella Typhi (6539) | Luxuriant | colourless | |
| Salmonella Abony (6017) | Luxuriant | colourless | |
| Proteus vulgaris (13315) | Luxuriant | colourless | |
| Shigella flexneri (12022) | Luxuriant | colourless | |
| Corynebacterium diphtheriae type gravis | Inhibited | - | |
| Precautions : | 1. For Laboratory Use. | | |
| | 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. | | |
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| Limitations : | Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium. | | | | |
| Use: | For the selective isolation and differentiation of coliforms from pharmaceutical products in accordance to microbial limit testing by harmonized system of (USP/BP/EP/JP). It is also recommended for selective isolation and differentiation of lactose fermenting and lactose non-fermenting enteric bacteria. | | | | |
| 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 |
| BH603 | 49.53 g/l | 10.094 L | 7.1+0.2 | Nil | 121°C/15 min. |