

TECHNICAL SHEET

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| B293 | Phenol Red Mannitol Broth | | |
| Formula | | | |
| Ingredients : | | gms/lit. | |
| Proteose peptone | | 10.00 | |
| Meat Extract B# | | 1.00 | |
| Sodium chloride | | 5.00 | |
| Phenol red | | 0.018 | |
| Mannitol | | 5.00 | |
| # - Equivalent to Beef extract | | | |
| Final pH (at 25°C): | | 7.4 ± 0.2 | |
| Directions : | | | |
| Suspend 21.02 grams in 1000 ml distilled water and mix well. Heat if necessary, to dissolve the medium completely. Distribute in fermentation tubes (tubes containing inverted Durham's tubes). Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. | | | |
| Principle : | | | |
| Proteose Peptone and Meat Extract B provide the carbon and nitrogen sources required for good growth of a wide variety of organisms. Sodium Chloride maintains the osmotic balance of the medium. Phenol Red serves as an indicator, turning from red – orange to yellow when acid is produced during fermentation of the added carbohydrate. | | | |
| QC Tests – (I) Dehydrated Medium | | | |
| Colour : | | Light yellow to pink | |
| Appearance : | | Homogeneous Free Flowing powder | |
| (II) Rehydrated medium | | | |
| pH (post autoclaving/heating) : | | 7.4 ± 0.2 | |
| Colour (post autoclaving/heating) : | | Red | |
| Clarity (post autoclaving/heating) : | | Clear | |
| (III) Q.C. Test Microbiological | | | |
| Cultural characteristics observed after 18 - 24 hrs. at 35 -37°C. | | | |
| MICROORGANISM (ATCC) | GROWTH | ACID | GAS |
| Citrobacter freundii (8090) | Luxuriant | Positive reaction, yellow colour | Positive reaction |
| Enterobacter aerogenes (13048) | Luxuriant | Positive reaction, yellow colour | Positive reaction |
| Escherichia coli (25922) | Luxuriant | Positive reaction, yellow colour | Positive reaction |
| Klebsiella pneumoniae (13883) | Luxuriant | Positive reaction, yellow colour | Positive reaction |
| Proteus vulgaris (13315) | Luxuriant | Negative reaction, no colour | Negative reaction |
| Salmonella typhimurium (14028) | Luxuriant | Positive reaction, yellow colour | Positive reaction |
| Salmonella typhi (6539) | Luxuriant | Positive reaction, yellow colour | Negative reaction |
| Serratia marcescens (8100) | Luxuriant | Positive reaction, yellow colour | Negative reaction |
| Shigella flexneri (12022) | Luxuriant | Positive reaction, yellow colour | Negative reaction |
| 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. To ensure accuracy of interpretation, uninoculated control tubes and/or inoculated Phenol Red Broth Base control tubes should be run in parallel with the fermentation tests. | | |

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| Use: | For Mannitol fermentation studies of microorganisms. | | | | |
| 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 |
| B293 | 21.02 g/l | 23.80 L | 7.4 ± 0.2 | Nil | 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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