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|--|--------------------------|--|-----------|---|--------------------|
| B974 | CASMAN BROTH BASE | | | | |
| Formula | | | | | |
| Ingredients : | | gms/lit. | | | |
| Proteose peptone | | 10.00 | | | |
| Tryptose | | 10.00 | | | |
| Beef extract | | 3.00 | | | |
| Dextrose | | 0.50 | | | |
| Corn starch | | 1.00 | | | |
| Sodium chloride | | 5.00 | | | |
| Nicotinamide | | 0.05 | | | |
| p-Amino benzoic acid (PABA) | | 0.05 | | | |
| Final pH (at 25°C) : | | 7.2 ± 0.2 | | | |
| Directions : | | | | | |
| Suspend 29.6 gms. of in 1000 ml. distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add 0.15% v/v sterile water lysed blood (water: blood: 3:1) of 5% sterile blood. Mix well and dispense as desired. | | | | | |
| Principle : | | | | | |
| Proteose peptone, tryptose and beef extract provide amino acids and other complex nitrogenous NUTRIENTS. Dextrose improves growth of pathogenic cocci. Corn starch prevents fatty acids from inhibiting the growth of Neisseria gonorrhoeae, without interfering with haemolytic reaction but neutralizes the inhibitory action of dextrose. Addition of blood provides the growth factors required for Haemophilus influenzae as hemin or X factor and Nicotinamide Adenine Dinucleotide (NAD) or V factor. Horse and rabbit blood are preferred as they are relatively free of NADase, an enzyme that destroys V factor. Nicotinamide is added to medium to inhibit nucleotidase of erythrocytes that destroys V factor. | | | | | |
| Inoculate the medium as soon as the specimen arrives at the laboratory. After incubation Haemophilus influenzae produces colourless to gray colonies with a characteristic 'mousy' odour while Neisseria gonorrhoeae produces small colourless to grayish- white colonies. | | | | | |
| QC Tests – (I)Dehydrated Medium | | | | | |
| Colour : | | Light yellow | | | |
| Appearance : | | Homogeneous Free Flowing powder | | | |
| (II)Rehydrated medium | | | | | |
| pH (post autoclaving/heating) : | | 7.2 ± 0.2 | | | |
| Colour (post autoclaving/heating) : | | a) Basal medium – Yellow b) With addition of blood : Cherry-red | | | |
| Clarity (post autoclaving/heating) : | | a) Clear to slightly opalescent b) Opalescent | | | |
| (III)Q.C. Test Microbiological | | | | | |
| Cultural characteristics observed after 40-48 hrs.at 35-37°C. | | | | | |
| MICROORGANISM (ATCC) | | GROWTH | | | |
| Haemophilus influenzae (35056) | | Good – luxuriant | | | |
| Neisseria meningitidis (13090) | | Luxuriant | | | |
| Streptococcus pneumoniae (6303) | | Luxuriant | | | |
| Streptococcus pyogenes (19615) | | Luxuriant | | | |
| Streptococcus mitis (9895) | | Luxuriant | | | |
| 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. | | | | | |
| Use : | | | | | |
| For isolation of fastidious microorganisms from clinical specimens under reduced oxygen tension. | | | | | |
| 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 |
| B974 | 29.6g/l | 16.89L | 7.2 ± 0.2 | 0.15% v/v sterile water lysed blood (water: blood:3:1) of 5% sterile blood. | 121°C / 15 minutes |