

TECHNICAL SHEET

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|--|---|---|-----------|----------------------------|---------------------------|
| B317 | | SELENITE BROTH (SELENITE F BROTH) TWIN PACK | | | |
| Formula | | | | | |
| Ingredients : | | gms/lit. | | | |
| Part A: | | - | | | |
| Casein enzymic hydrolysate | | 5.00 | | | |
| Lactose | | 4.00 | | | |
| Sodium phosphate | | 10.00 | | | |
| Part B: | | - | | | |
| Sodium hydrogen selenite | | 4.00 | | | |
| Final pH (at 25°C) : | | 7.0 ± 0.2 | | | |
| Directions : | | Suspend 4.0 grams of Part B in 1000 ml distilled water. Add 19.0 grams of Part A. Mix well. Warm to dissolve the medium completely. Distribute in sterile test tubes. Sterilize in a boiling water bath or free flowing steam for 10 minutes. DO NOT AUTOCLAVE. Excessive heating is detrimental. Discard the prepared medium if large amount of selenite is reduced (indicated by red precipitate at the bottom of tube/bottle). Note: Recommended to adjust the pH if slight drift is occurring after addition of selenite. WARNING- Sodium hydrogen selenite is very toxic, corrosive agent and causes teratogenicity and hence should be handled with great care. Upon contact with skin, wash immediately with a lot of water. | | | |
| Principle : | | Casein enzymic hydrolysate provides the nitrogen, vitamins and amino acids in Selenite Broth. Lactose is a fermentable carbohydrate. Selenite is reduced by organism growth. A rise in pH decreases the selective activity of the selenite. The acid produced by lactose fermentation helps to maintain a neutral pH. Sodium selenite inhibits the growth of gram-positive bacteria and many gram – negative bacteria. Sodium phosphate is a buffering agent. WARNING- Sodium hydrogen selenite is very toxic, corrosive agent and causes teratogenicity and hence should be handled with great care. Upon contact with skin, wash immediately with a lot of water. | | | |
| QC Tests – (I)Dehydrated Medium | | | | | |
| | Colour : | Part A: White to Light yellow Part B: White to cream | | | |
| | Appearance : | Part A: Homogeneous Free Flowing powder Part B: Crystalline powder | | | |
| (II)Rehydrated medium | | | | | |
| | pH (post autoclaving/heating) : | 7.0 ± 0.2 | | | |
| | Colour (post autoclaving/heating) : | Cream to yellow | | | |
| | Clarity (post autoclaving/heating) : | Clear | | | |
| (III)Q.C. Test Microbiological | | | | | |
| | Cultural characteristics observed when sub cultured on MacConkey Agar (B238) after an incubation at 35-37°C for 18-24 hours. | | | | |
| | MICROORGANISM (ATCC) | RECOVERY | | COLOUR OF COLONY | |
| | Salmonella typhimurium (14028) | Good –Luxuriant | | Colourless | |
| | Salmonella choleraeuis (12011) | Good – Luxuriant | | Colourless | |
| | Salmonella typhi (6539) | Good – Luxuriant | | Colourless | |
| | Escherichia coli (25922) | None to poor (No increase in number) | | Pink with bile precipitate | |
| | Escherichia coli (8739) | None to poor (No increase in number) | | Pink with bile precipitate | |
| Precautions : | 1. For Laboratory Use. | | | | |
| | 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. | | | | |
| | 3. VERY TOXIC. Fatal if inhaled or swallowed. Irritating to eyes, respiratory system and skin. Avoid contact with skin and eyes. Do not breathe dust. Wear suitable protective clothing. Keep container tightly closed. | | | | |
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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. Selenite Broth is inhibitory and recommended for selective isolation of Salmonella species. | | | | |
| | 3. Do not incubate the broth longer than 24 hours as inhibitory effect of selenite decreases after 6 - 12 hours of incubation | | | | |
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| Use : | For isolation of Salmonella species from faeces urine or other pathological materials. | | | | |
| 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 |
| | Part A: 19g/l Part B :4 g/l | 21.7 L | 7.0 ± 0.2 | NIL | 10 min free flowing steam |

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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