| **B395** | **ACTINOMYCES ISOLATION AGAR** |
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| **Formula** | |
| **Ingredients :** | **gms/lit.** |
| Sodium caseinate | 2.00 |
| L-Aspargine | 0.10 |
| Sodium propionate | 4.00 |
| Dipotassium phosphate | 0.50 |
| Magnesium sulphate | 0.10 |
| Ferrous sulphate | 0.001 |
| Agar | 15.00 |
| Final pH (at 25°C) : 8.1 ± 0.2 | |
| **Directions :** | |
| Suspend 22 gms. in 1000 ml. distilled water containing 5.0 ml. glycerol. Boil to dissolve the medium completely. Dispense as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. | |
| **Principle :** | |
| Actinomycete isolation agar contains sodium caseinate which is source of nitrogen. Asparagine is an amino acid and a source of organic nitrogen. Sodium peptone is a substrate used in aerobic fermentation. Dipotassium phosphate provides buffering capability to maintain pH balance. Magnesium sulphate and Ferrous sulphate provide sources of sulphates and metallic ions. Agar is the solidifying agent. The added glycerol is a source of carbon. | |

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| **QC Tests – (I)Dehydrated Medium** | | |
| | Colour : | Cream to light yellow |
| | Appearance : | Homogeneous Free Flowing powder |
| **(II)Rehydrated medium** | | |
| | pH (post autoclaving/heating) : | 8.1 ± 0.2 |
| | Colour (post autoclaving/heating) : | Cream to yellow |
| | Clarity (post autoclaving/heating) : | Opalescent gel |
| **(III)Q.C. Test Microbiological** | | |
| | Cultural characteristics observed after 18-24 hrs. at 30°C. | |
| | MICROORGANISM (ATCC ) | GROWTH |
| | Streptomyces albus (3004) | Good - luxuriant |
| | Streptomyces lavendulae (8664) | Good – luxuriant |
| | Nocardia asteroides (19247) | Good – luxuriant |
| | Escherichia coli (25922) | Inhibited |
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| **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 and propagation of Actinomycetes from soil and water. |
| **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 |
|---|---|---|---|---|---|
| **B395** | 22.00 g/l | 22.72 L | 8.1 ± 0.2 | Nil | 121$^0$C /15 min. |