

1230. THIOALKALIMICROBIUM MICROAEOPHILUM MEDIUM

Mineral base:

| | | |
|---------------------------------|--------|----|
| NaCl | 6.0 | g |
| K ₂ HPO ₄ | 2.0 | g |
| NaHCO ₃ | 40.0 | g |
| KNO ₃ | 0.5 | g |
| Distilled water | 1000.0 | ml |

Adjust the pH to 9.0 – 9.5 with 2M KOH. Dispense into closed vessels (i.e. a serum tube or bottle) with a liquid to air ratio of about 1:10. Flush the gas phase with nitrogen and add 2% oxygen. Sterilize at 120°C 20 min.

Trace element solution:

| | | |
|---|--------|----|
| EDTA | 5.0 | mg |
| FeSO ₄ x 7 H ₂ O | 2.0 | mg |
| ZnSO ₄ x 7 H ₂ O | 100.0 | mg |
| MnCl ₂ x 4 H ₂ O | 30.0 | mg |
| CoCl ₂ x 6 H ₂ O | 200.0 | mg |
| NiCl ₂ x 6 H ₂ O | 20.0 | mg |
| Na ₂ MoO ₄ x 2 H ₂ O | 30.0 | mg |
| CuCl ₂ x 2 H ₂ O | 10.0 | mg |
| H ₃ BO ₃ | 300.0 | mg |
| Distilled water | 1000.0 | ml |

Final pH should be 3, add HCl if needed. Sterilization - 120°C 20 min.

After sterilization add from sterile stock solutions:

| | | |
|--|---|----|
| Trace elements solution | 1 | ml |
| MgCl ₂ x 6 H ₂ O (200.0 g/l) | 1 | ml |
| (a white colloid will form which will rapidly dissolve after mixing) | | |
| Sodium thiosulfate pentahydrate (4 M – 992 g/l) - | 5 | ml |

Incubate statically until growth occurs, then shake at 100 rpm.