

## 1298: SULFUROSPIRILLUM ALKALITOLERANS MEDIUM

Final pH: 9.0

Final volume: 1002 ml

|  |         |    |
|--|---------|----|
| NaCl   | 1.00    | g  |
| K <sub>2</sub> HPO <sub>4</sub>                | 1.00    | g  |
| NaHCO <sub>3</sub>                             | 32.00   | g  |
| Na <sub>2</sub> CO <sub>3</sub>                | 10.60   | g  |
| KNO <sub>3</sub>                               | 2.00    | g  |
| MgCl <sub>2</sub> x 6 H <sub>2</sub> O         | 0.20    | g  |
| <b>Trace elements solution (Pfennig, 1965)</b> | 1.00    | ml |
| Yeast extract                                  | 0.02    | g  |
| <b>Seven vitamins solution</b>                 | 1.00    | ml |
| Na-DL-lactate                                  | 2.20    | g  |
| Na <sub>2</sub> S x 9 H <sub>2</sub> O         | 0.10    | g  |
| Distilled water                                | 1000.00 | ml |

Dissolve sodium chloride and hydrogenphosphate, then sparge medium with 100% N<sub>2</sub> gas for 30 - 45 min to make it anoxic. Add and dissolve carbonates, then dispense under 100% N<sub>2</sub> gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. After sterilization add nitrate, magnesium chloride, trace elements, yeast extract, vitamins, lactate and sulfide from sterile anoxic stock solution prepared under 100% N<sub>2</sub> gas. Vitamins should be sterilized by filtration. Adjust pH of complete medium to 9.0, if necessary.

### Trace elements solution (Pfennig, 1965) (from medium 1369)

|   |         |    |
|---|---------|----|
| EDTA  | 5.00    | g  |
| FeSO <sub>4</sub> x 7 H <sub>2</sub> O                | 2.20    | g  |
| ZnSO <sub>4</sub> x 7 H <sub>2</sub> O                | 0.10    | g  |
| MnCl <sub>2</sub> x 4 H <sub>2</sub> O                | 0.03    | g  |
| H <sub>3</sub> BO <sub>3</sub>                        | 0.03    | g  |
| CoCl <sub>2</sub> x 6 H <sub>2</sub> O                | 0.20    | g  |
| CuCl <sub>2</sub> x 2 H <sub>2</sub> O                | 0.03    | g  |
| NiCl <sub>2</sub> x 6 H <sub>2</sub> O                | 0.03    | g  |
| Na <sub>2</sub> MoO <sub>4</sub> x 2 H <sub>2</sub> O | 0.03    | g  |
| Distilled water                                       | 1000.00 | ml |

pH 3.0-4.0

### Seven vitamins solution (from medium 503)



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|                                   |         |    |
|-----------------------------------|---------|----|
| Vitamin B <sub>12</sub>           | 100.00  | mg |
| p-Aminobenzoic acid               | 80.00   | mg |
| D-(+)-biotin                      | 20.00   | mg |
| Nicotinic acid                    | 200.00  | mg |
| Calcium pantothenate              | 100.00  | mg |
| Pyridoxine hydrochloride          | 300.00  | mg |
| Thiamine-HCl x 2 H <sub>2</sub> O | 200.00  | mg |
| Distilled water                   | 1000.00 | ml |