Microorganisms



1353. YTBC - MEDIUM

| Mineral salts solution: | | |
|--|---------|----|
| Yeast Extract | 1.00 | g |
| Tryptone | 5.00 | g |
| Casamino Acids | 5.00 | g |
| Beef Extract (Lab-Lemco-Powder) | 5.00 | g |
| K₂HPO₄ | 1.00 | g |
| NH ₄ NO ₃ | 1.00 | g |
| $Na_2S \times 9 H_2O$ | 0.25 | g |
| Cysteine HCl | 0.25 | g |
| $NiCl_2 \times 6 H_20$ | 7.50 | mg |
| Trace Element Solution (see below) | 5.00 | ml |
| Resazurin (0.1% v/v) | 0.50 | ml |
| Artifical Seawater (see below) | 250.00 | ml |
| Distilled Water | 750.00 | ml |
| | | |
| Trace element solution: | | |
| FePO ₄ | 1.00 | g |
| $Na_2WO_4 \times 2 H_2O$ | 0.01 | g |
| $Na_2SO_3 \times 5 H_2O$ | 0.01 | g |
| Distilled Water | 500.00 | ml |
| Artifical seawater solution: | | |
| NaCl | 20.00 | g |
| $MgCl_2 \times 6 H_20$ | 3.00 | g |
| $MgSO_4 \times 7 H_20$ | 6.00 | g |
| NaHCO ₃ | 0.20 | g |
| CaCl ₂ x 2 H ₂ 0 | 0.30 | g |
| KCI | 0.50 | g |
| KH ₂ PO ₄ | 0.42 | g |
| NaBr | 0.05 | g |
| SrCl | 0.02 | g |
| Fe(NH ₄)citrate | 0.01 | g |
| $(NH_4)_2SO_4$ | 1.00 | g |
| Distilled Water | 1000.00 | ml |

Prepare the liquid medium without Na_2S and cysteine-HCl. Boil the medium in a water bath and cool under N_2 : CO_2 (80:20 v/v) to room temperature. Adjust to pH 7.0 with 10 M NaOH solution. Dispense the medium into Hungate tubes or serum bottles. Sterilize by autoclaving. Before inoculating add Na_2S and cysteine-HCl from sterile stock solutions.