## **Microorganisms**



## 311. SPOROMUSA MEDIUM (BETAINE)

$NH_4CI$	0.50	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	0.50	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.25	g
NaCl	2.25	g
FeSO <sub>4</sub> x 7 $H_2$ O solution (0.1% w/v in 0.1 N $H_2$ SO <sub>4</sub> )	2.00	ml
Trace element solution SL-10 (see medium 320)	1.00	ml
Selenite-tungstate solution (see medium 385)	1.00	ml
Yeast extract	2.00	g
Casitone	2.00	g
Betaine x H <sub>2</sub> O	6.70	g
Na-resazurin solution (0.1% w/v)	0.50	ml
K <sub>2</sub> HPO <sub>4</sub>	0.35	g
$KH_2PO_4$	0.23	g
NaHCO <sub>3</sub>	4.00	g
Vitamin solution (see medium 141)	10.00	ml
L-Cysteine-HCl x H <sub>2</sub> O	0.30	g
$Na_2S \times 9 H_2O$	0.30	g
Distilled water	1000.00	ml

Dissolve ingredients (except phosphates, bicarbonate, vitamins, cysteine and sulfide) and sparge medium with 80%  $N_2$  and 20%  $CO_2$  gas mixture for 30 – 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add phosphates, vitamins (sterilized by filtration), cysteine and sulfide to the medium after autoclaving from sterile stock solutions prepared under 100%  $N_2$  gas and bicarbonate from a sterile anoxic stock solution prepared under 80%  $N_2$  and 20%  $CO_2$  gas mixture. Adjust pH of complete medium to pH 7.0, if necessary.