## **Microorganisms**



## Main sol. 895

$(NH_4)_2SO_4$	1.00	g
NH <sub>4</sub> Cl	0.40	g
$Na_2S_2O_3 \times 5 H_2O$	0.10	g
K₂HPO₄	0.50	g
$MgSO_4 \times 7 H_2O$	0.10	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.05	g
NaCl	10.00	g
$FeSO_4 \times 7 H_2O (0.1\% \text{ w/v in } 0.1 \text{ N } H_2SO_4)$	2.00	ml
Modified Wolin's mineral solution	10.00	ml
Yeast extract (BD Bacto)	0.25	g
Tryptone (BD Bacto)	0.25	g
Sodium resazurin (0.1% w/v)	0.50	ml
L-Cysteine HCl x H <sub>2</sub> O	0.50	g
Na <sub>2</sub> CO <sub>3</sub>	3.00	g
Starch (soluble)	2.00	g
Wolin's vitamin solution (10x)	1.00	ml
Distilled water	1000.00	ml

Dissolve all ingredients except cysteine, carbonate, starch and vitamins. Sparge medium with 100%  $N_2$  gas for 30 - 45 min to make it anoxic, add cysteine and adjust pH to 7.5, then dispense medium under 100%  $N_2$  gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add starch and vitamins from sterile anoxic stock solutions prepared under 100%  $N_2$  gas and carbonate from a sterile anoxic stock solution prepared under 80%  $N_2$  and 20%  $CO_2$  gas atmosphere. Vitamins should be sterilized by filtration. Adjust pH of complete medium to 9.3 - 9.5, if necessary.