## Microorganisms



Main sol. 141b		
KCI	0.34	g
$MgCl_2 \times 6 H_2O$	4.00	g
$MgSO_4 \times 7 H_2O$	3.45	g
NH <sub>4</sub> Cl	0.25	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.14	g
K <sub>2</sub> HPO <sub>4</sub>	0.14	g
NaCl	6.00	g
Modified Wolin's mineral solution	10.00	ml
Fe(NH <sub>4</sub> ) <sub>2</sub> (SO <sub>4</sub> ) <sub>2</sub> x 6 H <sub>2</sub> O (0.1% w/v)	2.00	ml
Na-acetate	1.00	g
Yeast extract (OXOID)	2.00	g
Trypticase peptone (BD BBL)	2.00	g
Sodium resazurin (0.1% w/v)	0.50	ml
Wolin's vitamin solution (10x)	1.00	ml
NaHCO <sub>3</sub>	5.00	g
L-Cysteine HCl x $H_2O$	0.50	g
Na <sub>2</sub> S x 9 H <sub>2</sub> O	0.50	g
Distilled water	1000.00	ml

1. Dissolve ingredients (except bicarbonate, vitamins, cysteine and sulfide), sparge medium with 80%  $H_2$  and 20%  $CO_2$  gas mixture for 30 - 45 min to make it anoxic. Add and dissolve bicarbonate and adjust pH to 7.0, then dispense medium under 80%  $H_2$  and 20%  $CO_2$  gas atmosphere into anoxic Hungate-type tubes or serum vials to 30% of their volume and autoclave. After sterilization add cysteine and sulfide from sterile anoxic stock solutions autoclaved under 100%  $N_2$  gas atmosphere. Vitamins are prepared under 100%  $N_2$  gas atmosphere and sterilized by filtration. Adjust pH of final medium to 6.8 - 7.0.

2. For incubation use sterile 80%  $\rm H_2$  and 20%  $\rm CO_2$  gas mixture at two atmospheres of pressure.

3. Note: If the medium is being used without overpressure then adjust pH with a small amount of sterile anoxic 1 N HCl, if necessary.