## **Microorganisms**



## Main sol. 1273

KH <sub>2</sub> PO <sub>4</sub>	0.14	g
NH <sub>4</sub> Cl	0.54	g
$MgCl_2 \times 6 H_2O$	0.20	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.15	g
Yeast extract (OXOID)	0.20	g
Na-acetate	0.80	g
Modified Wolin's mineral solution	10.00	ml
Sodium resazurin (0.1% w/v)	0.50	ml
$Na_2CO_3$	1.00	g
Wolin's vitamin solution (10x)	1.00	ml
L-Cysteine HCl x H <sub>2</sub> O	0.50	g
$Na_2S \times 9 H_2O$	0.50	g
Distilled water	1000.00	ml

- 1. Dissolve ingredients (except carbonate, vitamins, cysteine and sulfide) and sparge medium with 80%  $H_2$  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 to 30% of their volume and autoclave. Add vitamins, cysteine and sulfide 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 mixture. The vitamin solution should be sterilized by filtration. Adjust pH of complete medium to 6.8, if necessary.
- 2. After inoculation pressurize vials to 1 bar overpressure with sterile 80%  $H_2$  and 20%  $CO_2$  gas mixture.