Microorganisms



Main sol. 141a

KCI	0.34	g
$MgCl_2 \times 6 H_2O$	4.00	g
$MgSO_4 \times 7 H_2O$	3.45	g
NH ₄ Cl	0.25	g
CaCl ₂ x 2 H ₂ O	0.14	g
K ₂ HPO ₄	0.14	g
NaCl	18.00	g
Modified Wolin's mineral solution	10.00	ml
$Fe(NH_4)_2(SO_4)_2 \times 6 H_2O (0.1\% \text{ w/v})$	2.00	ml
Na-acetate	1.00	g
Sodium resazurin (0.1% w/v)	0.50	ml
Wolin's vitamin solution (10x)	1.00	ml
L-Cysteine HCl x H ₂ O	0.50	g
$Na_2S \times 9 H_2O$	0.50	g
Distilled water	1000.00	ml

- 1. Dissolve ingredients (except vitamins, cysteine, and sulfide), sparge medium with 80% H_2 and 20% CO_2 gas mixture to reach a pH below 6 (at least 30 min), then dispense medium under same 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 the pH of the final medium to 6.2.
- 2. For incubation use sterile 80% $\rm H_2$ and 20% $\rm CO_2$ gas mixture at two atmospheres of pressure.