Microorganisms



Main sol. 879

NH ₄ Cl	1.00	g
KCI	0.10	g
$MgSO_4 \times 7 H_2O$	0.20	g
NaCl	0.80	g
KH ₂ PO ₄	0.10	g
CaCl ₂ x 2 H ₂ O	0.02	g
Modified Wolin's mineral solution	10.00	ml
Sodium resazurin (0.1% w/v)	0.50	ml
Yeast extract	1.00	g
NaHCO ₃	1.00	g
D-Fructose	5.00	g
Wolin's vitamin solution (10x)	1.00	ml
L-Cysteine HCl x H ₂ O	0.30	g
$Na_2S \times 9 H_2O$	0.30	g
Distilled water	1000.00	ml

Dissolve ingredients (except bicarbonate, yeast extract, fructose, vitamins, and reducing agents), sparge medium with $80\%~N_2$ and $20\%~CO_2$ gas mixture for 30 - 45 min to make it anoxic and adjust pH to 5.0. Dispense medium under the same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave at $121^{\circ}C$ for 15 min. Add yeast extract, fructose, vitamins (sterilized by filtration), cysteine, and sulfide from sterile stock solutions prepared under a $100\%~N_2$ gas atmosphere and bicarbonate from a sterile stock solution prepared under an $80\%~N_2$ and $20\%~CO_2$ gas atmosphere. Adjust the pH of the complete medium to 5.9!