Microorganisms



Main sol. 1011a

NaCl	3.00	g
K ₂ HPO ₄	0.14	g
$CaCl_2 \times 2 H_2O$	0.14	g
$MgSO_4 \times 7 H_2O$	0.34	g
$MgCl_2 \times 6 H_2O$	0.42	g
KCI	0.33	g
NH ₄ Cl	0.25	g
$Fe(NH_4)_2(SO_4)_2 \ge 6 H_2O$	0.01	g
Modified Wolin's mineral solution	10.00	ml
NaHCO ₃	1.50	g
$Na_2S_2O_3 \times 5 H_2O$	1.50	g
Wolin's vitamin solution (10x)	1.00	ml
Distilled water	1000.00	ml

1. Dissolve ingredients (except bicarbonate, thiosulfate and vitamins), then sparge medium with 80% N_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 up to a volume of 20% and autoclave. Add bicarbonate, thiosulfate and vitamins to the autoclaved medium from sterile anoxic stock solutions. Solutions of vitamins and thiosulfate are sterilized by filtration and stored under 100% N_2 gas, whereas the solution of bicarbonate is prepared under 80% N_2 and 20% CO_2 gas mixture and autoclaved. Adjust pH of the complete medium to 6.7.

2. After inoculation add sterile air in an amount that is equivalent to a volume of 50% of the headspace.