Microorganisms



Main sol. 1042

Sea Salt (SIGMA)	30.00	g
NaNO ₃	1.00	g
Wolfe's mineral elixir	2.00	ml
$VOSO_4 \times 5 H_2O (0.01\% \text{ w/v})$	0.50	ml
Sodium resazurin (0.1% w/v)	0.50	ml
FeSO ₄ x 7 H ₂ O	0.10	g
NaHCO ₃	1.00	g
Yeast extract	0.50	g
Na-pyruvate	1.00	g
Wolin's vitamin solution (10x)	2.00	ml
Distilled water	1000.00	ml

- 1. Dissolve ingredients (except ferrous sulfate, bicarbonate, yeast extract, pyruvate and vitamins), adjust pH to 7.0 and sparge medium with 100% N_2 gas for 30 45 min to make it anoxic. Dispense the medium under same gas atmosphere into Hungate-type tubes or serum vials and autoclave. Add ferrous sulfate, bicarbonate, yeast extract, pyruvate and vitamins from sterile anoxic stock solutions prepared under 100% N_2 gas and bicarbonate from a sterile anoxic stock solution prepared under 80% N_2 and 20% CO_2 gas atmosphere. Prepare the stock solution of ferrous sulfate by dissolving 1% (w/v) $FeSO_4 \times 7 H_2O$ in 0.1 N_2SO_4 . The stock solutions of pyruvate and vitamins should be sterilized by filtration. Adjust pH of the complete medium to 6.8-7.0.
- 2. Note: It may be necessary to add 10-20 mg sodium dithionite per liter (e.g. from 5% (w/v) solution, freshly prepared under 100% N_2 and filter-sterilized), if the medium is not completely reduced after inoculation.