Microorganisms



Main sol. 519

KCI	0.34	g
$MgCl_2 \times 6 H_2O$	4.00	g
$MgSO_4 \times 7 H_2O$	3.45	g
Na ₂ SO ₄	2.70	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
Yeast extract (OXOID)	0.50	g
Na-acetate	1.00	g
$Fe(NH_4)_2(SO_4)_2 \times 7 H_2O (0.1\% \text{ w/v})$	2.00	ml
Modified Wolin's mineral solution	10.00	ml
Sodium resazurin (0.1% w/v)	0.50	ml
NaHCO ₃	1.00	g
$Na_2S \times 9 H_2O$	0.50	g
Distilled water	1000.00	ml

- 1. Dissolve ingredients except bicarbonate and sulfide, then sparge medium with $80\%~N_2$ and $20\%~CO_2$ gas mixture for 30 45 min to make it anoxic. Add bicarbonate, adjust pH to 6.5 and dispense medium under $80\%~N_2$ and $20\%~CO_2$ gas atmosphere into anoxic serum vials (e.g., 20 ml medium per 100 ml bottle), pressurize bottles up to 2 bar overpressure, then autoclave. Before use, release excess pressure and reduce the medium with sulfide from a sterile anoxic stock solution prepared under $100\%~N_2$ gas.
- 2. After inoculation, add 2 bar overpressure of sterile 80% $\rm H_2$ and 20% $\rm CO_2$ gas mixture.