

711: SPOROBACTER MEDIUM

NH_4CI K_2HPO_4 KH_2PO_4 $MgCl_2 \times 6 H_2O$ $CaCl_2 \times 2 H_2O$ KCI NaCl Yeast extract	$ \begin{array}{c} 1.00\\ 0.30\\ 0.30\\ 0.20\\ 0.10\\ 0.10\\ 0.60\\ 0.50\\ \end{array} $	g g g g
NaCl	0.60	g
Na-acetate x 3 H ₂ O	0.50	g g
Trace element solution SL-10 Sodium resazurin (0.1% w/v) Na ₂ CO ₃	1.50 0.50 1.50	ml ml
3,4,5-Trimethoxycinnamic acid (TMC) Wolin's vitamin solution (10x)	1.19 1.00	g g ml
L-Cysteine HCl x H_2O Na ₂ S x 9 H_2O Distilled water	0.30 0.30 1000.00	g g ml

Dissolve ingredients (except carbonate, vitamins, TMC and reducing agents) and 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 and autoclave. After autoclaving add vitamins, TMC, cysteine and sulfide from sterile anoxic stock solutions prepared under 100% N_2 gas and carbonate from a sterile anoxic stock solution prepared under 80% N_2 and 20% CO_2 gas atmosphere. The vitamin solution should be sterilized by filtration. The stock solution of TMC (6% w/v) should be neutralized with NaOH prior to sterilization by filtration. Adjust pH of complete medium to 7.0, if necessary.

Trace element solution SL-10 (from medium 320)		
HCI (25%) 10.00	ml	
FeCl ₂ x 4 H ₂ O 1.50	g	
ZnCl ₂ 70.00	mg	
MnCl ₂ x 4 H ₂ O 100.00	mg	
H ₃ BO ₃ 6.00	mg	
CoCl ₂ x 6 H ₂ O 190.00	mg	
CuCl ₂ x 2 H ₂ O 2.00	mg	
NiCl ₂ x 6 H ₂ O 24.00	mg	
Na ₂ MoO ₄ x 2 H ₂ O 36.00	mg	
Distilled water 990.00	ml	

Microorganisms

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First dissolve $FeCl_2$ in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.

Wolin's vitamin solution (10x) (from medium 120)

Biotin	20.00	mg
Folic acid	20.00	mg
Pyridoxine hydrochloride	100.00	mg
Thiamine HCI	50.00	mg
Riboflavin	50.00	mg
Nicotinic acid	50.00	mg
Calcium D-(+)-pantothenate	50.00	mg
Vitamin B ₁₂	1.00	mg
p-Aminobenzoic acid	50.00	mg
(DL)-alpha-Lipoic acid	50.00	mg
Distilled water	1000.00	ml