## Microorganisms



Main sol. 717		
$(NH_4)H_2PO_4$	2.88	g
$MgSO_4 \times 7 H_2O$	0.10	g
$Ca(NO_3)_2 \times 4 H_2O$	0.05	g
Modified Wolin's mineral solution	10.00	ml
Yeast extract	0.10	g
Sodium resazurin (0.1% w/v)	0.50	ml
Na <sub>2</sub> CO <sub>3</sub>	1.50	g
Na-L-lactate	5.00	g
Na <sub>2</sub> -fumarate	3.20	g
Wolin's vitamin solution (10x)	1.00	ml
Seven vitamins solution	1.00	ml
$Na_2S \times 9 H_2O$	0.10	g
Distilled water	1000.00	ml

Dissolve ingredients except carbonate, lactate, fumarate, vitamins and sulfide. Sparge medium with 80%  $N_2$  and 20%  $CO_2$  gas mixture for 30 - 45 min to make it anoxic, then dispense under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add lactate, fumarate, vitamins 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. Stock solutions of fumarate and vitamins should be sterilized by filtration. The pH of the complete medium should be at 7.0 - 7.2.