Microorganisms



1210b. PYRODICTIUM DELANEYI MEDIUM

	10.00	
NaCl	18.00	g
$MgCI_2 \times 6 H_2O$	4.00	g
KCI	0.33	g
CaCl ₂ x 2 H ₂ O	0.33	g
(NH ₄) ₂ SO ₄	0.50	g
Trace element solution SL-10 (see medium 320)	1.00	ml
Selenite-tungstate solution (see medium 385)	1.00	ml
NaHCO ₃	2.50	g
KH ₂ PO ₄	0.33	g
FeCl ₂ x 4 H ₂ O	0.52	g
Yeast extract	0.20	g
Vitamin solution (see medium 141)	1.00	ml
L-Cysteine-HCI x H ₂ O	0.10	g
Amorphous Fe(OH) ₃ sludge (see medium 1210)	100.00	ml
Distilled water	900.00	ml

Dissolve ingredients except bicarbonate, hydrogenphosphate, ferrous chloride, yeast extract, vitamins, cysteine and ferric iron hydroxide sludge. Suspend pellet of ferric iron hydroxide in medium and sparge with 80% H₂ and 20% CO₂ gas mixture for 30 - 45 min to make it anoxic. Thereafter, dispense suspension under 80% H₂ and 20% CO₂ gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave for 30 min. Add hydrogenphosphate, ferrous chloride (dissolved in 0.1 N HCI), yeast extract, cysteine and vitamins from sterile anoxic stock solutions prepared under 100% N₂ gas and bicarbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas mixture. Vitamins and ferrous chloride should be sterilized by filtration. The pH of the complete medium should be at 5.5.