

935a. DEFERRIBACTER THERMOPHILUS MEDIUM

NH ₄ Cl	0.33	g
KCl	0.33	g
CaCl ₂ x 2 H ₂ O	0.33	g
MgCl ₂ x 6 H ₂ O	0.33	g
KH ₂ PO ₄	0.33	g
NaCl	25.00	g
Trace elements solution (see medium 141)	10.00	ml
KNO ₃	0.50	g
Na-acetate	2.00	g
Yeast extract	0.15	g
Sulfur, powdered	10.00	g
Na ₂ CO ₃	1.00	g
Vitamin solution (see medium 141)	10.00	ml
Distilled water	1000.00	ml

Dissolve ingredients (except sulfur, carbonate and vitamins), then sparge medium with 80% H₂ and 20% CO₂ gas mixture for 30 – 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials which contain already the appropriate amount of sulfur. Autoclave at a temperature of **110°C** for 20 min! Add vitamins from an anoxic stock solutions prepared under 100% N₂ gas and sterilized by filtration and carbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas atmosphere. The pH of the complete medium should be 6.5. After inoculation add sterile 80% H₂ and 20% CO₂ gas mixture to 1 bar overpressure.