

1565. ALKALIPHILUS TRANSVAALENSIS MEDIUM

Synthetic seawater (see below)	100.00	ml
Yeast extract (BD Bacto)	2.00	g
Tryptone (BD Bacto)	2.00	g
Na-tartrate	1.00	g
Na ₃ -citrate	1.00	g
NaNO ₃	0.25	g
(NH ₄) ₂ SO ₄	0.25	g
Fe(III)-citrate	0.20	g
Na ₂ SO ₄	1.00	g
Na ₂ CO ₃	40.00	g
Na ₂ S ₂ O ₃ x 5 H ₂ O	2.00	g
Distilled water	900.00	ml

Dissolve ingredients except carbonate and thiosulfate, then sparge medium with 100% N₂ gas for 30 – 45 min to make it anoxic. Add and dissolve carbonate, adjust pH to 11 – 12 with KOH, then dispense medium under 100% N₂ gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add thiosulfate to the autoclaved medium from an anoxic stock solution prepared under 100% N₂ gas and sterilized by filtration. After inoculation pressurize vessels to 1 bar overpressure with sterile 80% N₂ and 20% CO₂ gas mixture.

Synthetic seawater:

NaCl	30.00	g
K ₂ HPO ₄	0.14	g
CaCl ₂ x 2 H ₂ O	0.14	g
MgSO ₄ x 7 H ₂ O	3.40	g
MgCl ₂ x 6 H ₂ O	4.18	g
KCl	0.33	g
NiCl ₂ x 6 H ₂ O	0.50	mg
Na ₂ SeO ₃ x 5 H ₂ O	0.50	mg
Fe(NH ₄) ₂ (SO ₄) ₂ x 6 H ₂ O	0.01	g
Trace element solution (see medium 141)	10.00	ml
Distilled water	1000.00	ml