

343a: THERMOSIPHON MELANESIENSIS MEDIUM

Starch (soluble)	5.00	g
KH ₂ PO ₄	0.50	g
Modified Wolin's mineral solution	15.00	ml
NiCl ₂ x 6 H ₂ O (0.1% w/v)	2.00	ml
NaCl	20.00	g
Artificial sea water	250.00	ml
Yeast extract (OXOID)	2.00	g
Sodium resazurin (0.1% w/v)	0.50	ml
L-Cysteine HCl x H ₂ O	0.50	g
Na ₂ S x 9 H ₂ O	0.50	g
Distilled water	750.00	ml

Dissolve ingredients (except sulfide and cysteine) and adjust pH to 6.5. Boil medium for 1 min, then cool to room temperature under 100% N₂ gas atmosphere. Dispense under same gas atmosphere into anoxic Hungate-type tubes or serum vials to 30% of volume and autoclave. Add sulfide and cysteine from sterile anoxic stock solutions prepared under 100% N₂ gas. Adjust pH of complete medium to 6.5, if necessary.

Modified Wolin's mineral solution (from medium 141)

Nitrilotriacetic acid	1.50	g
MgSO ₄ x 7 H ₂ O	3.00	g
MnSO ₄ x H ₂ O	0.50	g
NaCl	1.00	g
FeSO ₄ x 7 H ₂ O	0.10	g
CoSO ₄ x 7 H ₂ O	0.18	g
CaCl ₂ x 2 H ₂ O	0.10	g
ZnSO ₄ x 7 H ₂ O	0.18	g
CuSO ₄ x 5 H ₂ O	0.01	g
AlK(SO ₄) ₂ x 12 H ₂ O	0.02	g
H ₃ BO ₃	0.01	g
Na ₂ MoO ₄ x 2 H ₂ O	0.01	g
NiCl ₂ x 6 H ₂ O	0.03	g
Na ₂ SeO ₃ x 5 H ₂ O	0.30	mg
Na ₂ WO ₄ x 2 H ₂ O	0.40	mg
Distilled water	1000.00	ml

First dissolve nitrilotriacetic acid and adjust pH to 6.5 with KOH, then add minerals. Adjust final to pH 7.0 with KOH.

Artificial sea water (from medium 343)

NaCl	27.70	g
MgSO ₄ x 7 H ₂ O	7.00	g
MgCl ₂ x 6 H ₂ O	5.50	g
KCl	0.65	g
NaBr	0.10	g
H ₃ BO ₃	30.00	mg
SrCl ₂ x 6 H ₂ O	15.00	mg
Citric acid	10.00	mg
KI	0.05	mg
CaCl ₂ x 2 H ₂ O	2.25	g
Distilled water	1000.00	ml