

375: METHANOHALOBIUM MEDIUM

NaCl	250.00	g
NH ₄ Cl	0.33	g
KH ₂ PO ₄	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
MgSO ₄ x 7 H ₂ O	4.00	g
Sodium resazurin (0.1% w/v)	0.50	ml
Na ₂ CO ₃	1.50	g
Trace element solution SL-10	1.00	ml
Yeast extract (OXOID)	0.05	g
Trimethylamine-HCl	5.00	g
Na ₂ S x 9 H ₂ O	0.50	g
Distilled water	1000.00	ml

1. Dissolve ingredients except carbonate, trace elements, yeast extract, trimethylamine and sulfide. Sparge medium with 80% N₂ and 20% CO₂ gas mixture for at least 30 - 45 min to make it anoxic, then dispense under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add trace elements, yeast extract, trimethylamine and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas and carbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas mixture. Adjust pH of complete medium to 7.4 with an anoxic sterile solution of 5% w/v Na₂CO₃, if necessary.

2. Note: A white precipitate that forms after autoclaving of the mineral base will dissolve again after storage at room temperature for 2 - 3 days.

Trace element solution SL-10 (from medium 320)

HCl (25%)	10.00	ml
FeCl ₂ x 4 H ₂ O	1.50	g
ZnCl ₂	70.00	mg
MnCl ₂ x 4 H ₂ O	100.00	mg
H ₃ BO ₃	6.00	mg
CoCl ₂ x 6 H ₂ O	190.00	mg
CuCl ₂ x 2 H ₂ O	2.00	mg
NiCl ₂ x 6 H ₂ O	24.00	mg
Na ₂ MoO ₄ x 2 H ₂ O	36.00	mg
Distilled water	990.00	ml

First dissolve FeCl₂ in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.