Microorganisms



1249: GEOALKALIBACTER SUBTERRANEUS MEDIUM

NaCl	17.00	g
NaNO ₃	2.55	g
$MgCl_2 \times 6 H_2O$	4.50	g
CaCl ₂ x 2 H ₂ O	0.35	g
NH ₄ Cl	1.00	g
KH ₂ PO ₄	0.08	g
Trace element solution SL-10	1.00	ml
Selenite-tungstate solution	1.00	ml
Na ₂ CO ₃	1.50	g
Na-acetate	1.00	g
Yeast extract	3.00	g
Distilled water	1000.00	ml

Dissolve ingredients (except carbonate, acetate and yeast extract), then sparge medium with $80\%~N_2$ and $20\%~CO_2$ gas mixture for 30 - 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Prior to inoculation add acetate and yeast extract from sterile anoxic stock solutions prepared under $100\%~N_2$ gas and carbonate from a sterile anoxic stock solution prepared under $80\%~N_2$ and $20\%~CO_2$ gas mixture. The pH of the complete medium should be at 7.0 - 7.2.

Trace element solution SL-10 (from medium 320)

HCI (25%)	10.00	ml
FeCl ₂ x 4 H ₂ O	1.50	g
ZnCl ₂	70.00	mg
$MnCl_2 \times 4 H_2O$	100.00	mg
H_3BO_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
$Na_2MoO_4 \times 2 H_2O$	36.00	mg
Distilled water	990.00	ml

First dissolve $FeCl_2$ in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.

Selenite-tungstate solution (from medium 385)

NaOH	0.50	g
$Na_2SeO_3 \times 5 H_2O$	3.00	mg
$Na_2WO_4 \times 2 H_2O$	4.00	mg

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Distilled water 1000.00 ml