Microorganisms



14: CLOSTRIDIUM FORMICACETICUM MEDIUM

This recipe contains strain-specific modifications for Clostridium formicaceticum DSM 97 *

Final pH: 8.0

Final volume: 1011 ml

Yeast extract	5.00	g
K ₂ HPO ₄	10.00	g
Trace element solution SL-4	10.00	ml
Pyridoxine hydrochloride (0.1% w/v)	1.00	ml
Na-thioglycolate	0.75	g
Sodium resazurin (0.1% w/v)	0.50	ml
Na_2CO_3	1.00	g
D-Fructose	5.00	g
Agar, for solid medium (optional)	15.00	g
Distilled water	1000.00	ml

Dissolve ingredients (except carbonate and fructose) and sparge medium with $100\%~N_2$ gas for at least 30 - 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add fructose from a sterile anoxic stock solution prepared under $100\%~N_2$ gas and carbonate from a sterile anoxic stock solution prepared under $80\%~N_2$ and $20\%~CO_2$ gas atmosphere. Adjust pH of complete medium to 8.0.

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Trace element solution SL-4 (from medium 14)

Na ₂ -EDTA	0.50	g
FeSO ₄ x 7 H ₂ O	0.20	g
$ZnSO_4 \times 7 H_2O$	0.10	g
MnCl ₂ x 4 H ₂ O	0.03	g
H_3BO_3	0.30	g
CoCl ₂ x 6 H ₂ O	0.20	g
CuCl ₂ x 2 H ₂ O	0.01	g
$NiCl_2 \times 6 H_2O$	0.02	g
$Na_2MoO_4 \times 2 H_2O$	0.03	g
Distilled water	1000.00	ml

First dissolve EDTA in distilled water and adjust pH to 7.0 using 2 N NaOH; then add other compounds.