

879. CLOSTRIDIUM LJUNGDAHLII MEDIUM

NH ₄ Cl	1.00	g
KCl	0.10	g
MgSO ₄ x 7 H ₂ O	0.20	g
NaCl	0.80	g
KH ₂ PO ₄	0.10	g
CaCl ₂ x 2 H ₂ O	0.02	g
Yeast extract	1.00	g
Trace element solution (see medium 141)	10.00	ml
Na-resazurin solution (0.1% w/v)	0.50	ml
NaHCO ₃	1.00	g
D-Fructose	5.00	g
Vitamin solution (see medium 141)	10.00	ml
L-Cysteine-HCl x H ₂ O	0.30	g
Na ₂ S x 9 H ₂ O	0.30	g
Distilled water	1000.00	ml

Dissolve ingredients (except bicarbonate, fructose, vitamins and reducing agents), sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 – 45 min to make it anoxic and adjust pH to 5.5. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave at 121°C for 15 min. Add fructose, vitamins (sterilized by filtration), cysteine and sulfide from sterile stock solutions prepared under 100% N₂ gas atmosphere and bicarbonate from a sterile stock solution prepared under 80% N₂ and 20% CO₂ gas atmosphere. Adjust pH of complete medium to **5.9!**

For [DSM 13641](#) replace fructose with 5.00 g/l sucrose added to the autoclaved medium from a sterile anoxic stock solution and increase amount of NaHCO₃ to 2.50 g/l. Adjust pH of complete medium to **6.9!**