

1315. ANAEROBIC THAUERA MEDIUM

KNO ₃	0.85	g
NaHCO ₃	2.52	g
CaCl ₂	0.01	g
MgSO ₄ x 7 H ₂ O	0.50	g
MnSO ₄	0.01	g
NH ₄ Cl	0.30	g
NaCl	0.05	g
Selenite and tungstate solution	2.00	ml
Distilled water	884.00	ml
Phosphate solution	100.00	ml
Acetate or capronate solution	10.00	ml
Vitamin solution	5.00	ml
Trace element solution SL-10	1.00	ml

Distribute to gas tight vessels, gas with 90% N₂ +10% CO₂ to achieve anaerobic conditions and autoclave. After cooling, add the phosphate solution, substrate solution, vitamin solution and trace element solution. After mixing, pH should be 7.1 - 7.5.

Phosphate solution

Na ₂ HPO ₄ x 2 H ₂ O	1.45	g
KH ₂ PO ₄	0.25	g
Distilled water	100.00	ml

Distribute to gas tight vessels under N₂, autoclave.

Acetate solution:

K-acetate	9.80	g
Distilled water	100.00	ml

Filter sterilize and gas with N₂. For strains DSM 12141, DSM 12142, DSM 11243 and DSM 12144, acetate may be replaced by Na-capronate (stock solution 2.76 g/100 ml).

Vitamin solution:

Vitamin B ₁₂	50.00	mg
Pantothenic acid	50.00	mg
Riboflavin	50.00	mg
Pyridoxamine-HCl	10.00	mg
Biotin	20.00	mg
Folic acid	20.00	mg
Nicotinic acid	25.00	mg

Nicotine amide	25.00	mg
α -lipoic acid	50.00	mg
p-aminobenzoic acid	50.00	mg
Thiamine-HCl x 2 H ₂ O	50.00	mg
Distilled water	1000.00	ml

Stir for some hours, filter sterilize the solution.

Trace element solution SL-10:

HCl (25%; 7.7 M)	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 ml. Distribute to gas tight vessels under N₂, autoclave.

Selenite and tungstate solution:

Distilled water	1000.00	ml
NaOH	0.50	g
Na ₂ SeO ₃ x 5 H ₂ O	3.00	mg
Na ₂ WO ₄ x 2 H ₂ O	4.00	mg

First dissolve NaOH, subsequently the metal salts. Distribute to gas tight vessels under N₂, autoclave.