

1406. HALARSENATIBACTER MEDIUM

Solution A:

NaCl	151.0	g
Na ₂ SO ₄	84.0	g
K ₂ SO ₄	25.0	g
(NH ₄) ₂ SO ₄	0.05	g
KH ₂ PO ₄	0.08	g
K ₂ HPO ₄	0.15	g
MgSO ₄ x 7 H ₂ O	0.025	g
Na ₂ WO ₄	0.075	g
H ₃ BO ₃	4.0	g
Na ₂ SeO ₄	0.01	mg
Trace Element Solution SL10 (see below)	3.0	ml
Na ₂ CO ₃	36.0	g
NaHCO ₃	6.0	g
Yeast extract (after autoclaving)	1.0	g
Na-lactate (after autoclaving)	10.0	mM
Arsenate (after autoclaving)	5	mM
Cysteine HCl	0.025	%
Vitamin solution med. 141 (after autoclaving)	10.0	ml
Distilled Water	1000.0	ml

Vitamin Solution Med. 141:

Biotin	2.00	mg
Folic acid	2.00	mg
Pyridoxine-HCl	10.00	mg
Thiamine-HCl x 2 H ₂ O	5.00	mg
Riboflavin	5.00	mg
Nicotinic acid	5.00	mg
D-Ca-pantothenate	5.00	mg
Vitamin B ₁₂	0.10	mg
p-Aminobenzoic acid	5.00	mg
Lipoic acid	5.00	mg
Distilled water	1000.00	ml

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Trace Element Solution SL10:

HCl (25%)	7.700	ml
FeSO ₄ x 7 H ₂ O	1.500	g
ZnCl ₂	0.070	g
MnCl ₂ x 4 H ₂ O	0.100	g
H ₃ BO ₃	0.300	g
CoCl ₂ x 6 H ₂ O	0.190	g
CuCl ₂ x 2 H ₂ O	0.002	g
NiCl ₂ x 6 H ₂ O	0.024	g
Na ₂ MoO ₄ x 2 H ₂ O	0.036	g
Distilled Water	1000.0	ml

Prepare the liquid medium without the following. NaHCO₃, yeast extract, Na-lactate, arsenate. Adjust to pH 9.5. Boil the medium in a water bath and cool under N₂ to room temperature. Dispense the medium into Hungate tubes or serum bottles under gassing with N₂. Sterilize by autoclaving. Before inoculation add from sterile stock solutions:

NaHCO ₃	6.0	g/l
Yeast extract (after autoclaving)	1.0	g/l
Na-lactate (after autoclaving)	10.0	mM
Arsenate (after autoclaving)	5	mM
Cysteine HCl	0.025	%
Vitamin Solution Med. 141 (after autoclaving)	10.0	ml/l