

908. MEDIUM FOR CHLORATE RESPIRERS

Solution A:

NH ₄ Cl	0.25	g
NaH ₂ PO ₄	0.60	g
KCl	0.10	g
NaHCO ₃	2.50	g
NaClO ₃	1.00	g
Na-Acetate	1.36	g
Distilled water	1000.00	ml

Solution B:

MgSO ₄	30.00	mg
CaCl ₂ x 2 H ₂ O	10.00	mg
Distilled water	10.00	ml

Solution C:

Na ₂ MoO ₄	25.00	mg
Na ₂ WO ₄ x 2 H ₂ O	25.00	mg
Distilled water	1000.00	ml

Solution D: 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 1000.0 ml.

Solution E: Vitamins

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.

continued

Autoclave solutions A, B and C separately and anaerobically under 80% N₂ + 20% CO₂ atmosphere. Combine 1000 ml solution A, 10 ml solution B and 10 ml solution C. Add 5 ml vitamin solution E and 1 ml trace element solution D. The pH should be 7.2 without further adjustment. Reactivate ampoules of DSM 13638 in medium 1 under aerobic conditions first, then transfer to anaerobic medium 908.