

1121. MMJS MEDIUM (modified)

NaCl	20.00	g
K ₂ HPO ₄	0.09	g
KH ₂ PO ₄	0.07	g
CaCl ₂ x 2 H ₂ O	0.80	g
NH ₄ Cl	1.25	g
MgSO ₄ x 7 H ₂ O	4.00	g
MgCl ₂ x 6 H ₂ O	3.00	g
KCl	0.33	g
Fe -citrate	0.01	g
FeSO ₄ x 7 H ₂ O	0.01	g
Na ₂ S ₂ O ₃ x 5 H ₂ O	3.00	g
Sulfur, powdered	3.00	g
Trace mineral solution (see medium 1121)	10.00	ml
Distilled water	1000.00	ml

The pH of the medium is adjusted with NaOH to 6.8. Steam medium for 3 hours on each of 3 successive days. The separately autoclaved, concentrated solutions including each of follows are added to the medium. Then a mix gas (80%N₂, 20%CO₂) is purged for 5 min. Finally, the mix gas (79%N₂, 20%CO₂, 1%O₂) is compressed into gas phase (>80% volume of the tube or bottle) at 2 atm.

Vitamin solution (see below)	final concentration 1.0	ml/l
NaHCO ₃	final concentration 0.2	%

Trace mineral solution:

Nitrilotriacetic acid	1.500	g
MnSO ₄ x x H ₂ O	0.500	g
CoSO ₄ x 7 H ₂ O	0.500	g
ZnSO ₄ x 7 H ₂ O	0.180	g
CuSO ₄ x 5 H ₂ O	0.010	g
KAl(SO ₄) ₂ x 12 H ₂ O	0.020	g
H ₃ BO ₃	0.010	g
Na ₂ MoO ₄ x 2 H ₂ O	0.001	g
SrCl ₂ x 6 H ₂ O	0.010	g
NaBr	0.010	g
KI	0.010	g
NiCl ₂ x 6 H ₂ O	0.100	g
Na ₂ SeO ₃ x 5 H ₂ O	0.100	g
Fe ₂ (SO ₄) ₃ x xH ₂ O	1.000	g
H ₂ WO ₄	0.100	g

Distilled water	1000.000	ml
<i>Vitamin solution:</i>		
Biotin	0.0020	g
Folic acid	0.0020	g
Pyridoxine-HCl	0.0100	g
Thiamine-HCl-2H ₂ O	0.0050	g
Riboflavin	0.0050	g
Nicotinic acid	0.0050	g
D-Ca-pantothenate	0.0050	g
Vitamin B ₁₂	0.0001	g
p-Aminobenzoic acid	0.0050	g
Lipoic acid	0.0050	g
Distilled water	1000.0000	ml