

MDV

Minerals	Stock Solutions (g/L)	Quantity (mL Stock/L Media)	Molarity (mM)
NaCl	241	100	400
MgCl ₂ ·6H ₂ O	435	20	43
KCl	54	10	7.2
Na ₂ SO ₄	32	100	23
CaCl ₂ ·2H ₂ O	160	10	11

Adjust to 900mL with mQ water and autoclave.

After cooling, add the following filter sterilized (0.2 µm) components to complete the medium:

Minerals	Stock Solutions (g/L)	Quantity (mL Stock/L Media)	Molarity (mM)
NaNO ₃	100	5	6
NaHCO ₃	18	10	2
NaH ₂ PO ₄ ·H ₂ O	6.9	1	0.05
Na ₂ SiO ₃ ·9H ₂ O	21.3	2	0.15
Citrate mix	See recipe below	10	-
Trace metal mix	See recipe below	1	-
Vitamins 8 Mix	See recipe below	1	-
M2	See recipe below	1	-

For solid medium use 7g/L of agarose. Sterilize the agarose separately in 550 ml of milliQ water. In this case the mineral solution is filled up to 400 ml.

Trace Metal Mix:

Trace metals	Stock1 (g/L)	Trace metal mix (Stock1 mL/L)
CuSO ₄ · 5 H ₂ O	9.8	1
ZnSO ₄ · 7H ₂ O	22	1
CoCl ₂ · 6H ₂ O	10	1
MnCl ₂ · 4H ₂ O	18	1
Na ₂ MoO ₄ · 2H ₂ O	6.3	1
Na ₂ SeO ₃ · 5H ₂ O	0.016	0.1

Prepare apart a stock solution for each Trace metal (Stock1) and use the quantity indicated for the final Trace Metal Mix

Citrate Mix:

Trace metals	Quantity g/L
C ₆ H ₈ O ₇ · H ₂ O	0.3
Fe-NH ₄ -citrate	0.36

M2:

Trace metals	Quantity (g/L)
KBr	39
SrCl ₂ ·6H ₂ O	10
AlCl ₃ ·6H ₂ O	0.014
LiCl	0.003
KI	0.010
H ₃ BO ₃	11
RbCl	0.03

Vitamins 8 mix:

Vitamins	Stock 1 (g/100mL)	Vitamins 8 mix (Stock1 mL/100mL)
Biotin*	0.004	0.1
Thiamine-HCl	0.02	10
Cyanocobalamin	0.08	0.1
Folic acid*	0.008	0.1
Inositol	0.02	1
Nicotinic acid	0.04	1
Thymine*	0.012	1
Ca-d-pantothenate	0.04	1

*Dissolve first in 1N NaOH and then bring to volume with mQ water.

Prepare apart a stock solution for each Vitamin (Stock1) and use the quantity indicated for the final Vitamins 8 mix.