

Aspergillus Media

Minimal Medium

50X MM Salts

Component	Amt./Liter
NaNO ₃	300 gm
KCl	26 gm
MgSO ₄ :7H ₂ O	24.65 gm

Dissolve each in the order given and store at room temperature over a few drops of chloroform.

1M Phosphate Buffer pH~6.8

Component	Amt./Liter
KH ₂ PO ₄	68 gm
K ₂ HPO ₄	87.1 gm

Making Minimal Medium (MM)

Component	Amt./Liter
50X Salts	20 ml
Dextrose	10 gm for plates or 3.6 gm for liquid.
1M KPO ₄ pH 6.8*	12 ml * Add after autoclaving for liquid media to prevent precipitate forming.
Trace Elements	1 ml
Agar	12.5 gm For solid media.

Complete Medium (CM)

Add the following to MM.

Component	Amt./Liter
Yeast Extract	1 gm
Peptone	2 gm
Tryptone	1 gm
Vitamin Mix	2 ml
CM Supplement	10 ml

Malt Extract Medium (MAG)

Component	Amt./Liter
Malt Extract	20 gm
Peptone	2 gm
Dextrose	10 gm
Trace Elements	1 ml
Vitamin Mix	2 ml
Agar	20 gm For solid media.

Yeast Extract Medium (YAG)

Component	Amt./Liter
Yeast Extract	5 gm
Dextrose	10 gm
Trace Elements	1 ml
Vitamin Mix	2 ml
1M MgSO ₄ or Cl ₂	10 ml
Agar	15 gm For solid media.

TRACE ELEMENTS SOLUTIONS

Cove's Trace Elements Solution

Component	Amt./Liter
Na ₂ B ₄ O ₇ ·10H ₂ O	40 mg
CuSO ₄ ·5H ₂ O	400 mg
Ferric Citrate or chloride	800 mg
MnSO ₄ ·H ₂ O	800 mg
NaMoO ₄ ·2H ₂ O	800 mg
ZnSO ₄ ·7H ₂ O	8 gm

Dissolve each fully in the order shown, before adding the next. This stock is 1000 fold concentrated. Store at room temperature over a few drops of chloroform. A precipitate will eventually form, just shake the bottle before using.

Clive Roberts Trace Elements Solution

Component	Amt./Liter
FeSO ₄ ·7H ₂ O	1 gm
ZnSO ₄ ·7H ₂ O	8.8 gm
CuSO ₄ ·5H ₂ O	400 mg
MnSO ₄ ·H ₂ O	150 mg
Na ₂ B ₄ O ₇ ·10H ₂ O	100 mg
(NH ₄) ₆ Mo ₇ O ₂₄ ·4H ₂ O	50 mg

Dissolve each in the order given. This stock is 1000 fold concentrated. Store at room temperature over a few drops of chloroform.

Greg's Modified Trace Elements

Component	Amt./liter	mM
0.25 M EDTA pH8.0	100 ml	25
FeSO ₄ 7H ₂ O	1 gm	3.6
ZnSO ₄ 7H ₂ O	8.8 gm	30.1
CuSO ₄ 5H ₂ O	0.4 gm	1.6
MnSO ₄ H ₂ O	0.15 gm	0.89
Na ₂ B ₄ O ₇ 10H ₂ O	0.1 gm	0.26
NaMoO ₄ 2H ₂ O	0.1 gm	0.41
CaCl ₂ 2H ₂ O	0.1 gm	0.68

Dissolve each in the indicated order being sure that the first is fully dissolved before adding the next. This is 1000 fold concentrated. Store at room temperature.

VITAMIN MIX

Component	Amt./Liter
p-Aminobenzoic acid	1 gm
Niacin	1 gm
Pyridoxine HCl	1 gm
Riboflavin	1 gm
Thiamine HCl	1 gm
Choline HCl	1 gm
d-Biotin	2 mg

Store at 4°C in the dark after autoclaving.

CM SUPPLEMENT

Component	Amt./Liter
Adenine HCl	5 gm
L-Methionine	5 gm
L-Lysine or Arginine	36.5 gm
Riboflavin	0.5 gm

Store at 4°C in the dark after autoclaving.

From the May laboratory