

SFM

Components and Final Concentration in Culture Medium	Stock Solution	Addition per Litre of Culture Medium
1. HEPES (1.00 mM)	238.10 g / 1 dH ₂ O	1.0 ml
2. Ca(NO₃)₂ x 4 H₂O (0.21 mM)	100.00 g / 1 dH ₂ O	0.5 ml
3. MgSO₄ x 7 H₂O (0.203 mM)	20.00 g / 1 dH ₂ O	2.5 ml
4. K₂HPO₄ x 3 H₂O (13.20 μM)	5.00 g / 1 dH ₂ O	0.6 ml
NaNO₃ (0.35 mM)	50.00 g / 1 dH ₂ O	
Na₂CO₃ (0.19 mM)	32.00 g / 1 dH ₂ O	
5. H₃BO₃ (16 μM)	1.00 g / 1 dH ₂ O	1 ml
6. Vitamin Solution		1 ml
Vitamin B12 (0.15 nM)	0.20 mg / 1 dH ₂ O	
Biotin (4.10 nM)	1.00 mg / 1 dH ₂ O	
Thiamine-HCl (0.30 μM)	100.00 mg / 1 dH ₂ O	
Niacinamide (0.80 nM)	0.10 mg / 1 dH ₂ O	

pH of the Vitamin Solution should be around pH 7

7. Trace Metals

7.1. Preparation of Trace Metal Solution

Na₂EDTA x 2 H₂O : 4.36 g

FeCl₃ x 6 H₂O : 3.15 g

Dissolve in 1000 ml dH₂O, then add 1 ml of Primary Trace Metals each (see below).

Primary Trace Metals are stored frozen as 1 ml aliquots.

7.2. Primary Trace Metals

7.2.1. K₂CrO₄	0.194 g / 100 ml dH ₂ O
7.2.2. CoCl₂ x 6 H₂O	1.00 g / 100 ml dH ₂ O
7.2.3. CuSO₄ x 5 H₂O	0.25 g / 100 ml dH ₂ O
7.2.4. MnCl₂ x 4 H₂O	18.00 g / 100 ml dH ₂ O
7.2.5. Na₂MoO₄ x 2 H₂O	1.89 g / 100 ml dH ₂ O
7.2.6. NiSO₄ x 6 H₂O	0.27 g / 100 ml dH ₂ O
7.2.7. H₂SeO₃	0.13 g / 100 ml dH ₂ O
7.2.8. Na₃VO₄	0.184 g / 100 ml dH ₂ O
7.2.9. ZnSO₄ x 7 H₂O	2.20 g / 100 ml dH ₂ O

adjust the pH to 7,0 and autoclave