SFM + Si

Components and Final Concentration in Culture Medium	Stock Solution	Addition per Litre of Culture Medium
1. **HEPES** (1.00 mM)	238.10 g / l dH_2O	1.0 ml
2. **$Ca(NO_3)_2$ x 4 H_2O** (0.21 mM)	100.00 g / l dH_2O	0.5 ml
3. **$MgSO_4$ x 7 H_2O** (0.203 mM)	20.00 g / l dH_2O	2.5 ml
4. **K_2HPO_4 x 3 H_2O** (13.20 µM)	5.00 g / l dH_2O	0.6 ml
$NaNO_3$ (0.35 mM)	50.00 g / l dH_2O	
Na_2CO_3 (0.19 mM)	32.00 g / l dH_2O	
5. **H_3BO_3** (16 µm)	1.00 g / l dH_2O	1 ml
6. **Vitamin Solution**		1 ml
Vitamin B12 (0.15 nM)	0.20 mg / l dH_2O	
Biotin (4.10 nM)	1.00 mg / l dH_2O	
Thiamine-HCl (0.30 µM)	100.00 mg / l dH_2O	
Niacinamide (0.80 nM)	0.10 mg / l dH_2O	

pH of the Vitamin Solution should be around pH 7

7. **Trace Metals** 1 ml

7.1. Preparation of Trace Metal Solution

Na_2EDTA x 2 H_2O : 4.36 g

$FeCl_3$ x 6 H_2O : 3.15 g

Dissolve in 1000 ml dH_2O, 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. K_2CrO_4	0.194 g / 100 ml dH_2O
7.2.2. $CoCl_2$ x 6 H_2O	1.00 g / 100 ml dH_2O
7.2.3. $CuSO_4$ x 5 H_2O	0.25 g / 100 ml dH_2O
7.2.4. $MnCl_2$ x 4 H_2O	18.00 g / 100 ml dH_2O
7.2.5. Na_2MoO_4 x 2 H_2O	1.89 g / 100 ml dH_2O
7.2.6. $NiSO_4$ x 6 H_2O	0.27 g / 100 ml dH_2O
7.2.7. H_2SeO_3	0.13 g /100 ml dH_2O
7.2.8. Na_3VO_4	0.184 g /100 ml dH_2O
7.2.9. $ZnSO_4$ x 7 H_2O	2.20 g / 100 ml dH_2O

8. **Na_2SiO_3 x 9 H_2O** (0.50 mM)	28.42 g / l dH_2O	5 ml

adjust the pH to 7,0 and autoclave