Microorganisms



Main sol. 1105		
Na ₂ CO ₃	22.00	g
NaHCO ₃	8.00	g
NaCl	6.00	g
K ₂ HPO ₄	0.50	g
Distilled water	1000.00	ml

1. Dissolve in this order in 1L preferably MilliQ water. Sterilize in closed bottles at 120°C 20 min. After cooling, usually there will be some precipitate on the bottom. That's why it is handy to have another empty 1L bottle to decant clear top solution into it.

2. After sterilization add from concentrated steril stock solutions:

Trace metals solution (Pfennig & Lippert, 1966)	1.00	ml
MgSO ₄ x 7 H ₂ O (20 %)	1.00	ml
Na ₂ S ₂ O ₃ x 5 H ₂ O (2 M, pH 10)	10.00	μl
Vitamin B ₁₂ (0.01 %)	1.00	ml
Isobutyramide (1 M, 8.7 g in 100 ml H_2O dest)	10.00	ml

- 3. Trace metals, $MgSO_4 \times 7 H_2O$ and $Na_2S_2O_3 \times 5 H_2O$ solution you can autoclave
- 4. Vitamin B_{12} and Isobutyramide solution you have to filter-sterilize