

# 2xBG11 + V8

(Modified from: Allen M. M. and Stanier R. Y., 1968. Growth and division of some unicellular blue-green algae. *J Gen Microbiol.* 51: 199-202.)

Minerals	Stock Solutions (g/L)	Quantity (mL Stock/L Media)	Final Concentration (mM)
MgSO <sub>4</sub> · 7H <sub>2</sub> O	7.5	20	0.61
CaCl <sub>2</sub> · 2H <sub>2</sub> O	3.6	20	0.49
Na <sub>3</sub> -citrate	0.6	20	0.048
Na <sub>2</sub> -EDTA · 2H <sub>2</sub> O	0.1	20	0.005
Trace metal mix (A5 + Co)	See recipe below	2	-

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)	Final Concentration (mM)
NaNO <sub>3</sub>	150	10	16
K <sub>2</sub> HPO <sub>4</sub> · 3H <sub>2</sub> O	4	20	0.35
NaHCO <sub>3</sub>	8.4	10	1
Fe-NH <sub>4</sub> -citrate	6	1	-
Vitamin8 mix	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 A5 + Co:

Trace metals	Quantity g/L	Concentration in the final media (mM)
H <sub>3</sub> BO <sub>3</sub>	2.86	0.047
MnCl <sub>2</sub> · 4H <sub>2</sub> O	1.81	0.009
ZnSO <sub>4</sub> · 7H <sub>2</sub> O	0.22	0.0007
Na <sub>2</sub> MoO <sub>4</sub> · 2H <sub>2</sub> O	0.39	0.0016
CuSO <sub>4</sub> · 5H <sub>2</sub> O	0.08	0.0003
Co(NO <sub>3</sub> ) <sub>2</sub> · 6H <sub>2</sub> O	0.05	0.0002

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