

# Spirulina medium

(Modified: Aiba S. and Ogawa T., 1977. Assessment of growth yield of a blue-green alga, *Spirulina platensis*, in axenic and continuous culture. *J Gen Microbiol.* 102: 179-182.)

Autoclave solution A and B separately.

## A

Minerals	Quantity (g/L)	Molarity (mM)
NaHCO <sub>3</sub>	13.61	162
Na <sub>2</sub> CO <sub>3</sub>	4.03	40
K <sub>2</sub> HPO <sub>4</sub> · 3H <sub>2</sub> O	0.84	4

Adjust to 500mL with mQ water and autoclave.

## B

Minerals	Stock Solutions (g/L)	Quantity (mL Stock/L Media)	Molarity (mM)
NaNO <sub>3</sub>	150	16.6	30
K <sub>2</sub> SO <sub>4</sub>	100	1	0.6
NaCl	250	4	20
MgSO <sub>4</sub> · 7H <sub>2</sub> O	7.5	26.6	0.8
CaCl <sub>2</sub> · 2H <sub>2</sub> O	3.6	11.1	0.002
SchlösserMicronutrient Solution	6 mL	-	-
ChuMicronutrient Solution	1 mL	-	-

Adjust to 500mL with mQ water and autoclave.

After cooling, mix solution A and B and add the following filter sterilized (0.2 µm) compounds to complete the media:

Minerals	Stock solutions (g/L)	Quantity (mL Stock/L Media)
Fe-NH <sub>4</sub> -citrate	6	0.25
Vitamin B12 (Cyanocobalamin)	0.02	1

### **ChuMicronutrient Solution:**

Trace metals	Quantity (g/L)
Na <sub>2</sub> EDTA · 2H <sub>2</sub> O	0.05
H <sub>3</sub> BO <sub>3</sub>	0.62
CuSO <sub>4</sub> · 5H <sub>2</sub> O	0.02
ZnSO <sub>4</sub> · 7H <sub>2</sub> O	0.04
CoCl <sub>2</sub> · 6H <sub>2</sub> O	0.02
MnCl <sub>2</sub> · 4H <sub>2</sub> O	0.01
Na <sub>2</sub> MoO <sub>4</sub> · 2H <sub>2</sub> O	0.01

### **SchlösserMicronutrient Solution:**

Trace metals	Quantity (g/L)
Na <sub>2</sub> EDTA · 2H <sub>2</sub> O	0.75
FeCl <sub>3</sub> · 6H <sub>2</sub> O	0.97
MnCl <sub>2</sub> · 4H <sub>2</sub> O	0.04
ZnCl <sub>2</sub> · 6H <sub>2</sub> O	0.005
CoCl <sub>2</sub> · 6H <sub>2</sub> O	0.002
Na <sub>2</sub> MoO <sub>4</sub> · 2H <sub>2</sub> O	0.004