

Keller

(Keller D. K., Selvin R. C., Claus W., Guillard R. R. L., 1987. Media for the culture of oceanic ultraphytoplankton. *J Phycol.* 23: 633-638.)

Minerals	Stock Solutions (g/L)	Quantity (mL Stock/L Media)	Final Concentration (mM)
NaCl	245.45	100	420
MgCl ₂ ·6H ₂ O	406.6	10	20
KCl	74.60	10	10
MgSO ₄ ·7H ₂ O	603.8	10	25
CaCl ₂ ·2H ₂ O	147	10	10

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)
NaHCO ₃	21	10	2.5
Vitamins3 Mix	See recipe below	1	-
Keller Mix (Sigma K1630)	-	0.23 g	-

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.

Vitamins 3 Mix:

Vitamins	Vitamins 3 mix (quantity/100mL)
Thiamine-HCl	10 mg
d-biotin*	100 µL (from a stock of 5 mg in 10mL)
Vitamin B12	100 µL (from a stock of 5 mg in 10mL)

*Dissolve first in 0.1 mL 2M NaOH. Then add 9.9 mL of mQ water.