# F/2 Media

f/2 medium (Guillard and Ryther 1962)

## NaNO<sub>3</sub> and NaH<sub>2</sub>PO<sub>4</sub> Stock Solutions:

For each, to 1.0 L of distilled water add

NaNO3 Stock	75.0 g
NaH2P04 Stock	5.0g

#### **Trace Metals stock solution:**

To 1.0 L of distilled water add the following:

Na <sub>2</sub> EDTA	4.36 g	
FeCl <sub>3</sub> *6H <sub>2</sub> 0	3.15 g	
Primary Metals Stocks	1.0 mL of each (recipe below)	

## **Primary Trace Metals stock solutions**

To 100 mL of distilled water add the following:

CuSO <sub>4</sub> *5H <sub>2</sub> O	0.98 g
ZnSO <sub>4</sub> *7H <sub>2</sub> 0	2.2 g
CoCl <sub>2</sub> *6H <sub>2</sub> 0	1.0 g
MnCl <sub>2</sub> *4H <sub>2</sub> 0	1.8 g
NaMoO4*2H <sub>2</sub> 0	0.63 g

#### Vitamin Stock solution

Biotin	$10.0 \text{ mL of } 0.1 \text{ mg}^{*}\text{mL}^{-1}$ solution
Vitamin B <sub>12</sub>	$1.0 \text{ ml of } 1.0 \text{ mg}^{*}\text{mL}^{-1}$ solution
Thiamine HCl	0.2 g

# **Final Medium**

To 950 mL of 0.22  $\mu M$  filtered seawater (FSW) add:

NaNO <sub>3</sub> Stock Solution	1.0 mL
----------------------------------	--------

NaH <sub>2</sub> PO <sub>4</sub> Stock Solution	1.0 mL
Trace Metals Stock Solution	1.0 mL
Vitamin Stock Solution	0.5 mL

Filter sterilize at  $0.22 \,\mu\text{M}$  before use and store at 4 degrees C. \*Si has been removed from this recipe to reduce the growth of contaminating diatoms.