

ESAW

Reference: Harrison, P.J., Waters, R. and Taylor, F.J.R. 1980. A broad spectrum artificial seawater medium for coastal and open ocean phytoplankton. J. Phycol. 16: 28-35.

STOCK	STOCK SOLUTION	/Litre
1. Salt Solution I	see recipe below	500 ml
2. Salt Solution II	see recipe below	500 ml
3. NaNO ₃	46.67 g/L	1 ml
4. Na ₂ SiO ₃ .9H ₂ O (neutralize first to pH 7.5)	30 g/L	1 ml
5. Na glycerophosphate	6.67 g/L	1 ml
6. Trace metals and Na ₂ EDTA	see recipe below	1 ml
7. Vitamins	see recipe	1 ml
8. NaHCO ₃		0.12 g/L
9. HCl (1N)		1.44 ml

Add both NaHCO₃ and 1N HCl after pH adjustment. Store the salt solutions separately. Adjust the pH to 8.0 before autoclaving.

STOCK-SALT SOLUTION I	g/Litre
1. NaCl	20.758 g/L
2. KCl	0.587 g/L
3. NaHCO ₃	0.170 g/L
4. NaBr	0.0746 g/L
5. H ₃ BO ₃	0.0225 g/L
6. NaF	0.0027 g/L
7. Na ₂ SO ₄ .10H ₂ O	5.5 g/L

STOCK-SALT SOLUTION II	g/Litre
1. MgCl ₂ .6H ₂ O	9.395 g/L
2. CaCl ₂ .2H ₂ O	1.316 g/L
3. SrCl ₂ .6H ₂ O	0.0214 g/L

ESAW TRACE METAL MIX

STOCK SOLUTION	g/L
1. Na ₂ EDTA.2H ₂ O	5.53 g/L
2. H ₃ BO ₃	3.80 g/L
3. Fe(NH ₄) ₂ (SO ₄).6H ₂ O	2.34 g/L
4. FeCl ₃ .6H ₂ O	0.16 g/L
5. MnSO ₄ .4H ₂ O	0.54 g/L
6. ZnSO ₄ .7H ₂ O	0.073 g/L
7. CoSO ₄ .7H ₂ O	0.016 g/L