

PROVASOLI'S ENRICHED SEAWEATER MEDIA

To the base solution (I), add the following amounts of prepared solutions II, III, & IV

<u>Ingredients</u>	<u>Quantity (ml)</u>	<u>X2</u>	<u>X3</u>
Solution I: Base Solution	1000	2000	3000
Solution II: Fe (as EDTA complex; 1:1molar)	200	400	600
Solution III: P II metals	200	400	600
Solution IV: Vitamins Vitamin B12, Biotin	1	2	3

***Adjust pH of final solution to 7.8 using HCl, then sterilize and refrigerate**

<u>Solution Components</u>			
<u>Ingredients</u>			
<u>Solution I: Base Solution</u>	<u>Quantity (X1)</u>	<u>Quantity (X2)</u>	
Deionized water	1000 mL (total)	2000 mL (total)	
NaNO ₃	2.8 g	5.6 g	
Na ₂ glycerophosphate	0.4 g	0.8 g	
Thiamine-HCl (Vit. B1)	0.004 g	0.008 g	
Tris Buffer	4 g	8 g	
<u>Solution II: Fe (as EDTA complex; 1:1 molar)</u>	<u>Quantity</u>		
Deionized water	1000 mL (total)	2000 mL (total)	
Fe (NH ₄) ₂ (SO ₄) ₂ · 6H ₂ O	0.700 g	1.400 g	
Na ₂ EDTA	0.600 g	1.200 g	
<u>Solution III: P II metals</u>	<u>Quantity</u>		
Deionized water	1000 mL (total)	2000 mL (total)	
H₃BO₃ (Boric Acid) <i>omit per MWL, KMH, MH discussion 3/4/22</i>	1.140 g	2.28 g	
FeCl ₃ · 6H ₂ O (Ferric Chloride)	0.049 g	0.098 g	
MnSO ₄ · H ₂ O (Manganese sulfate monohydrate)	0.130 g	0.260 g	
Na ₂ EDTA (Disodium Ethylenediamine Tetraacetate)	1 g	2 g	
CoSO ₄ · 7H ₂ O (Cobaltous sulfate heptahydrate)	0.005 g	0.010 g	
ZnSO ₄ · 7H ₂ O (Zinc sulfate, 7-Hydrate)	0.022 g	0.044 g	
<u>Solution IV: Vitamins</u>	<u>Quantity</u>		
Deionized water	25 mL (total)		
Vitamin B12	0.002 g		
Biotin	0.001 g		