

MES-volvox Medium Recipe

Directions

General purpose medium for freshwater strains, especially those requiring ammonium. Suitable for xenic and axenic cultures. Modified volvox medium.

For 1 L Total

1. To approximately 950 mL of dH₂O, add each of the components in the order specified (except vitamins) while stirring continuously.

2. Adjust the pH to 6.7.

3. Bring the total volume to 1 L with dH₂O.

*For 1.5% agar medium add 15 g of agar into the flask; do not mix.

4. Cover and autoclave medium.

5. When cooled add vitamins.

*For agar medium add vitamins, mix, and dispense before agar solidifies.

6. Store at refrigerator temperature.

#	Component	Amount	Stock Solution Concentration	Final Concentration
1	Ca(NO ₃) ₂ ·4H ₂ O (Sigma C 5676)	1 mL/L	11.8 g/100 mL dH ₂ O	0.5 mM
2	MgSO ₄ ·7H ₂ O (Sigma 230391)	1 mL/L	4 g/100 mL dH ₂ O	0.16 mM
3	Na ₂ glycerophosphate·5H ₂ O (Sigma G 6501)	1 mL/L	5 g/100 mL dH ₂ O	0.16 mM
4	KCl (Fisher P 217)	1 mL/L	5 g/100 mL dH ₂ O	0.67 mM
5	MES (Sigma M-8250)	1.95 g/L		10 mM
6	P-IV Metal Solution	6 mL/L		
7	NH ₄ Cl (Fisher A 649-500)	1 mL/L	2.67 g/100 mL dH ₂ O	0.5 mM
8	Vitamin B₁₂	1 mL/L		
9	Biotin Vitamin Solution	1 mL/L		

