

Allen Medium Recipe

Directions

Modification of M.M. Allen's freshwater medium for blue-greens. Suitable for axenic and xenic cultures. The marine LB 1928 *Spirulina platensis* [Medium: ES-enriched seawater] can be adapted to Allen medium (D. James 1982, pers. Comm.).

For 1 L Total

1. To approximately 950 mL of dH₂O add each of the components in the order specified while stirring continuously.
 2. Adjust pH to 7.8.
 3. Bring total volume to 1 L with dH₂O.
- *For 1% agar medium: add 10 g of agar to the flask; do not mix.
4. Cover and autoclave medium.
 5. Store at refrigerator temperature.

#	Component	Amount	Stock Solution Concentration	Final Concentration
1	HEPES buffer (Sigma H-3375)	2.3 g/L		0.01 M
2	NaNO ₃ (Fisher BP360-500)	1.5 g/L		0.018 M
3	P-IV Metal Solution	1 mL/L		
4	K ₂ HPO ₄ (Sigma P 3786)	5 mL/L	1.5 g/200 mL dH ₂ O	0.215 mM
5	MgSO ₄ ·7H ₂ O (Sigma 230391)	5 mL/L	1.5 g/200 mL dH ₂ O	0.152 mM
6	Na ₂ CO ₃ (Baker 3604)	5 mL/L	0.8 g/200 mL dH ₂ O	0.19 mM
7	CaCl ₂ ·2H ₂ O (Sigma C-3881)	10 mL/L	0.5 g/200 mL dH ₂ O	0.17 mM
8	Na ₂ SiO ₃ ·9H ₂ O (Sigma 307815)	10 mL/L	1.16 g/200 mL dH ₂ O	0.204 mM
9	Citric Acid·H ₂ O (Fisher A 104)	1 mL/L	1.2 g/200 mL dH ₂ O	0.029 mM