

# BG-11 Medium Recipe

## Directions

Improved recipe as of March 2009

For 1 L Total

Liquid media:

1. To approximately 900 mL of dH<sub>2</sub>O add the first 9 components in the order specified while stirring continuously.
2. Bring total volume to 1 L with dH<sub>2</sub>O.
3. Cover and autoclave medium.
4. Allow to cool then store at refrigerator temperature.

Agar media:

1. To approximately 400 mL of dH<sub>2</sub>O add the first 9 components in the order specified while stirring continuously.
2. Bring total volume to 500 mL with dH<sub>2</sub>O.
3. In a separate container add 15 g of agar to 500 mL of dH<sub>2</sub>O.
4. Cover and autoclave both solutions.
5. In a water bath allow both solutions to cool to 45-50°C.
6. Add sterile Sodium Thiosulfate (Component 10) to agar solution and mix well.
7. Combine both agar and liquid solutions, mix well. Note the agar can solidify quickly.
8. Allow to cool then store at refrigerator temperature.

#	Component	Amount	Stock Solution Concentration	Final Concentration
1	NaNO <sub>3</sub> (Fisher BP360-500)	10 mL/L	30 g/200 mL dH <sub>2</sub> O	17.6 mM
2	K <sub>2</sub> HPO <sub>4</sub> (Sigma P 3786)	10 mL/L	0.8 g/200 mL dH <sub>2</sub> O	0.23 mM
3	MgSO <sub>4</sub> ·7H <sub>2</sub> O (Sigma 230391)	10 mL/L	1.5 g/200 mL dH <sub>2</sub> O	0.3 mM
4	CaCl <sub>2</sub> ·2H <sub>2</sub> O (Sigma C-3881)	10 mL/L	0.72 g/200 mL dH <sub>2</sub> O	0.24 mM
5	Citric Acid·H <sub>2</sub> O (Fisher A 104)	10 mL/L	0.12 g/200 mL dH <sub>2</sub> O	0.031 mM

6	Ferric Ammonium Citrate	10 mL/L	0.12 g/200 mL dH2O	0.021 mM
7	Na <sub>2</sub> EDTA·2H <sub>2</sub> O (Sigma ED255)	10 mL/L	0.02 g/200 mL dH2O	0.0027 mM
8	Na <sub>2</sub> CO <sub>3</sub> (Baker 3604)	10 mL/L	0.4 g/200 mL dH2O	0.19 mM
9	<a href="#">BG-11 Trace Metals Solution</a>	1 mL/L		
10	Sodium Thiosulfate Pentahydrate (agar media only,sterile) (Baker 3946)	1 mL/L	49.6 g/200 mL dH2O	1 mM