Protocol: M9 Buffer

This protocol for M9 Buffer is adapted from WormBook.

<u>Note:</u> When autoclaving liquid, the rule of thumb is to make sure the final volume of your liquid is no more than $\frac{1}{2}$ the max volume of the container (e.g., no more than 500 mL of liquid in a 1 L Pyrex bottle.)

1. To an autoclavable bottle, add:

Reagent	Amount to add per 500ml final volume	Amount to add per 250ml final volume
KH ₂ PO ₄	1.5 g	0.75 g
Na ₂ HPO ₄	3 g	1.5 g
NaCl	2.5 g	1.25 g

- i. Weigh out and add dry reagents to autoclavable Pyrex bottle.
- ii. Using a graduated cylinder, measure out the appropriate volume of diH₂O.
- iii. Add diH₂O to the dry reagents and swirl.
- 2. Autoclave the mixture (You MUST get trained on how to use the autoclave before doing this!)
 - i. Make sure the screw-caps are **LOOSLEY** screwed on, allowing gas to escape the bottle.
 - ii. Place a piece of autoclave tape across the cap, making sure one end is taped to the glass bottle.
 - iii. Autoclave for 25 minutes (use "SLOW EXHAUST" setting for liquids).
- 3. After autoclaving, add the following volumes of 1M MgSO₄:

Reagent	Amount to add per 500ml final volume	Amount to add per 250ml final volume
1M MgSO ₄	500μΙ	250μΙ