Dunaliella salina/Artemia salina Medium

Materials

- 1000 mL milliQ H2O
- 10 mL 1M MOPS pH 7.4
- 5 mL 1M CaCl2
- 1mL 1000x Trace Metals
- 5mL 1M NaHCO3
- 2mL 1M KNO3
- .2 mL 1M KH2PO4
- 1 L Beaker
- 1 L Graduated Cylinder
- 1 L Bottle
- Serological Pipette
- 3 5 mL & 1 10 mL tips
- Micropipettes: p1000, p200
- Fume Hood
- .01 g – 300 g capable Scale
- Weigh Boats and Spatulas
- Autoclave
- Stir Plate & Bar (or a Stir Stick if not available)
- Optional: Autoclave Tape and pen
- Depending on Molarity of Salinity: (In grams)

	0.5M	1.0M	1.5M	2.0M	2.5M	3.0M	3.5M	4.0M	4.5M
NaCl	29.22	58.44	87.66	116.9	146.1	175.3	204.5	233.8	263
MgSO4·H2O	4.93	9.85	14.79	19.72	24.65	29.58	34.51	39.44	44.36
KCl	0.75	1.49	2.24	2.98	3.72	4.47	5.22	5.96	6.71

Procedure

1. Center beaker of 700 mL milliQ water on stir plate, insert stir bar and turn on plate
    a. If using a stir stick, just remember to stir the mixture with each new ingredient
2. Weigh and add specified amounts of NaCl, $MgSO4 \cdot H2O$ and KCl for the desired molarity
3. After the solids have dissolved, pour the mixture into a graduated cylinder
4. Add milliQ H2O until the level is 975 mL
5. Pour the mixture into a bottle
6. Autoclave the bottle to make it sterile
    a. Put the lid on but do not screw it all the way (this way air can go in and thus the outside pressure will not dent the bottle
    b. Cover the top of the bottle with aluminum foil (this way nothing will escape or enter your bottle besides air)
    c. Put autoclave tape on the bottle (Not needed, but it does help in telling whether your bottle has been autoclavd)
7. Let the bottle cool until comfortable to touch
8. Place the bottle and needed materials into the fume hood
9. Add 10 mL MOPS
10. Add 5 mL CaCl2
11. Add 1mL Trace Metals
12. Add 5mL NaHCO3
13. Add 2mL KNO3
14. Add .2 mL KH2PO4

Note: Remember to label bottle and only open it in sterile areas