50% Glucose Solution

Glucose solutions are primarily used in the supplementation of growth media to encourage a culture to proliferate. A stock solution can be aliquoted into media to obtain the desired final concentration in which to grow your culture.

Note: If using glucose to supplement a culture, be sure to regularly add fresh media (with an appropriate buffer, ex: HEPES) as proliferating cultures can rapidly exhaust key nutrients and will die prematurely if these nutrients are not replenished.

Material:

- Sigma-Aldrich D-(+)-Glucose ≥99.5% (GC)
- Autoclaved RO water
- Stir bar
- Hot plate

Protocol:

Note: do NOT autoclave glucose solutions.

1. In a graduated cylinder, measure out the desired volume of autoclaved RO water.
2. Weigh out 0.5g/mL of glucose in a weigh boat then add it to an appropriately sized beaker, using some of the RO water to transfer any remaining powder.
3. Add the remaining RO water and a stir bar.
4. On low heat, stir until fully dissolved.
5. Once cooled enough to safely handle, filter sterilize the solution into a properly labeled Falcon tube or Eppendorf tube.