

1 X aCSF (Artificial Cerebrospinal Fluid)

2.5mM KCl, 1.25mM, 125mM NaCl, 2.5mM NaHCO₃, 2mM CaCl₂, 1.3mM MgCl₂, 10mM dextrose

Intended Use: Buffer solution used in electrophysiology

METHOD

Add the 10 X ACSF (without dextrose and calcium) to a clean container. Dilute to 80% final volume with MilliRO water. Weigh out dextrose and calcium chloride and add to the container. Mix with stirring on a stir plate. Once the dextrose and calcium chloride are dissolved, make up volume to 100% with more MilliRO water. Measure the osmolarity and record on this sheet. Label container with NAME, PREPARATION DATE, OSMOLARITY and INITIALS. This solution can be kept at room temperature.

COMPOSITION

Raw Material	Amount Required per Litre	Final Concentration of 10X Stock
10 X ACSF (no dextrose or calcium)	100mL	1 X
Dextrose FW 180.16	1.8g	10mM
CaCl₂ Calcium Chloride FW 147.02	0.294g	2mM