

MF-2041 Low Volume Cell for C-3 Cell Stand

Most common cells for electrochemical analysis require sample volumes of 5-10 mL. When rare or expensive materials are studied, a lower volume is desirable. A low-volume sample cell is available as an option for the C-3 Cell Stand.* It holds a minimum cell volume of 200 μ L. The sample tube accommodates standard BAS voltammetry electrodes. It also allows a 1/16" Teflon tube to be inserted adjacent to the working electrode so that nitrogen can be blanketed over the sample to exclude oxygen. The normal C-3 auxiliary electrode may be placed in the supporting electrolyte via the cell plug port. This will suffice when the solution is very conductive and the generated current is low. The porous Vycor frit at the end of the sample chamber may introduce significant iR drop, particularly with organic solvents or high current. In these instances, we recommend that the auxiliary electrode be placed within the working electrode compartment as shown.

The porous Vycor frit in the sample compartment is shipped dry and must be soaked in the supporting electrolyte solution for at least one hour prior to use. This procedure will ensure that the frit is fully wetted and has low resistance. The frit cannot be allowed to dry out once wetted. It should be stored in supporting electrolyte solution between experiments. If it does dry, it can be replaced (p/n MF-2064).

The C3 Low Volume Cell Kit includes: cell vial, cell top, sample chamber and o-ring, reference electrode, auxiliary electrode, (2) port plug, and replacement vycor frits.

*Use this cell only with a C-3 Cell Stand. The cell arm of the C-3 is required to secure this cell top.

