

IMPORTANT INSTRUCTION FOR THE μ -PREPCELL, HIGH PRESSURE

These instructions are specifically written for the following product:

PN 204.3305H μ -PrepCell, high pressure, Ti HyREF

This cell is designed for operation at back pressures up to 250 bar. The cell is delivered without Titanium and PTFE O-ring pre-installed. Prior to use the supplied Titanium WE and O-ring need to be installed.

WARNING



The information below warns about a hazard. It calls attention to a procedure or practice which, if not adhered to, may result in severe injury or damage of the product. Only proceed in case these conditions are fully understood and met.



Wear proper eye protection when working with the cell.

Do NOT operate the μ -PrepCell at pressures above 250 bar. Operation at higher pressures may eject the Pd rod (1) at a high velocity out of the PEEK sleeve.

Do NOT remove the black cap and loosen the HyREF (2), it is fixed at the factory with a pre-defined force and marked with red sealing lacquer. A cell that has been tempered with will not be exchanged even during the warranty period. In case of leakage please contact Antec.

The cell should preferably be operated in the ROXY potentiostat oven compartment using the cell clamp with the door of the instrument closed. Keep the HyREF connector of the cell cable (provided with your ROXY potentiostat) secured on the REF electrode at all times when the cell is pressurized (see photo insert on the right side). It may confine the Pd rod to the potentiostat oven in the event that the Pd rod is ejected from its PEEK sleeve.



INSTALLATION & PRIMING

To assure optimum performances and repeatability, Antec recommends polishing of both the titanium WE and cell block prior to every experiment according to the procedure described in the FlexCell metal WE flattening-polishing kit manual (pn 250.7010.02). Repeatability of your cell will lay the ground work for repeatable experiments. Antec recommends using a new sheet of polishing paper every time. One can also use the rougher black polishing paper (delivered with the cell) in case of more pronounced contaminations/discolorations. It is most important to flush the cell with large amounts of solvents prior to mounting it to assure no particle remains in the cell. Particles can not only cause blockage but also alter the performances of your cell. Antec recommends the use of water and ethanol.

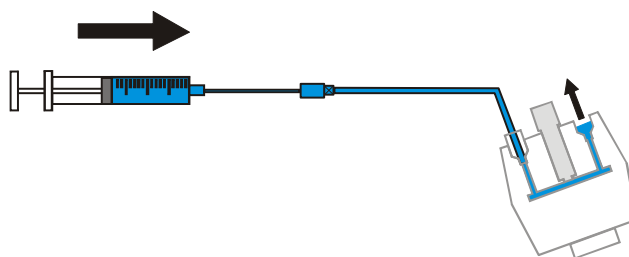
For specific instructions about disassembling/assembling of the cell, please refer to the μ -PrepCell user manual (pn 204.0010). Connect the cell in your system with the supplied PEEK finger tight fittings, narrow, hex-head (pn 250.1572) as described below.

Bubbles in the μ -PrepCell is the number one source of poor reproducibility. Bubbles can be generated at the electrode (by electrolysis) or when connecting the inlet or outlet tubing. This section contains important information how to prime/fill the μ -PrepCell without the introduction of air-bubbles.

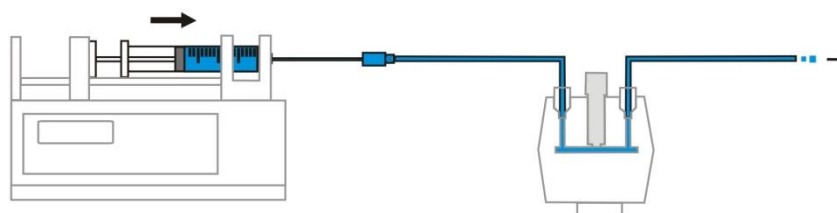


This hardware should only be used by trained laboratory personnel. Use proper eye and skin protection when working with solvents. Additional safety requirements or protection may be necessary depending on the chemicals used in combination with this equipment. Make sure that you understand the hazards associated with the chemicals used and take appropriate measures with regards to safety and protection.

1. Make sure that the mobile phase and sample to be introduced in the μ -PrepCell have been thoroughly degassed.
2. Connect a PEEK inlet tubing (1/16" OD) at the syringe/LC pump side or at the column side (in case the cell is connected post-column) using the 10-32 PEEK fingertight fittings with hex-head (pn 250.2572) supplied with the cell. When applying high backpressures use a 1/4" inch wrench to tighten the fitting.



3. Fill the cell tilted (45° angle) until no air bubble comes out of the outlet port of the μ -PrepCell. Use a tissue to absorb/wipe off the siphoning liquid. Applying pressure can help riding of air.
4. Connect an appropriate PEEK outlet tubing (1/16" OD) to the outlet port of the cell using the supplied 10-32 PEEK fingertight fittings (pn 250.2572). When applying high backpressures use a 1/4" inch wrench to tighten the fitting. Fill the outlet tubing with sample solution/mobile phase. Applying pressure can help rid the cell and connecting tubings of air bubbles.



5. The cell is now primed and ready for use.