Cell-Seal Usage

Relevant for autosorb iQ, autosorb 6iSA, NOVA series, VStar





1 Introduction

The Anton Paar QuantaTec Cell-Seal prevents the exposure of air- and moisture-sensitive materials during the transfer of the sample cells between degas and analysis ports by automatically closing off cells. A built-in 20 micron metal frit filter blocks the elutriation of fine powders into the instrument port, and a self-sealing, spring-loaded valve with actuator opens the valve when the sample cell is inserted into the station.

The Cell-Seal easily adapts to glass sample cells with diameters of 9 mm (P/N: 222935) and 12 mm (P/N: 222959).



Figure 1: Cell-Seal – in 9 mm and 12 mm sizes

2 Advantages of the Cell-Seal

The Cell-Seal is constructed with high-quality inert materials, including stainless steel. It is designed to improve experimental results and prevent issues from arising by:

- Automatically preventing ingress of atmosphere into the sample cell to maintain sample integrity.
- Eliminating elutriation of fine particles into the instrument's degas and analysis stations during evacuation.

3 Using the Cell-Seal

The Cell-Seal can be used in cells without a filler rod, or with a shorter than standard *no flare* filler rod in *dimpled* or regular cells. It has two O-ring grooves so that it can accommodate slight differences in the internal diameter of the stems of glass sample cells.

To Use:

- Slide the Cell-Seal into the sample cell completely with the Cell-Seal Opener facing the outside of the sample cell.
- If the Cell-Seal does not fit a particular 9 mm or 12 mm sample cell, switch the O-ring provided between the upper groove and lower groove by gently rolling or pinching it.



Figure 2: Cell-Seal with parts labeled

4 Conclusions

Use this simple, effective accessory to help safeguard sample integrity and ensure consistent, high quality measurements.

Anton Paar QuantaTec application-sp@anton-paar.com support-sp@anton-paar.com www.anton-paar.com