

## Demountable IR cell holder – type 6401 Beta cell

### **Description**

The 6401 Beta cell is a simple holder comprising:

- 1 x stainless steel hexagonal holder with female thread
- 1 x plastic hexagonal window/sample holder with male thread
- 1 x slider plate for holding the cell in place in your instrument
- 2 each PTFE spacers: 0.015mm, 0.025mm, 0.050mm, 0.10mm, 0.20mm and 0.25mm
- 1 each PTFE spacers 0.50mm and 1.0mm

*Windows are NOT included in the scope of delivery. You will need two non-drilled, 25 mm Ø windows in a material suited to your application. [Click here to see our range of windows.](#)*

### **Handling**

*Stainless steel and plastic holders*

The holders should be cleaned and dried before use.

*Spacers*

Clean the spacers by rinsing them in alcohol or chloroform. Allow them to dry by evaporation or by placing them between layers of paper towels. Handle them carefully – they can be easily stretched or torn. The thinner they are, the more susceptible they are to damage.

*Windows*

Do not allow windows made of water soluble materials such as KBr, KCl or NaCl to come into contact with water. Similarly, avoid humid conditions as far as possible. Don't use CaF<sub>2</sub> windows with solutions containing ammonium salts. In general, windows should be handled with dry hands, rubber gloves, finger cots or forceps. Always grip the windows by the edges – never on the face.

### **Assembly**

1. Lay the stainless steel holder on a clean, dry surface with the thread facing up.
2. Place one of the 0.25mm PTFE spacers in the holder.
3. Place one of the windows into the holder.
4. Now add the appropriate spacer for the required cell thickness.
5. Using a syringe, introduce your sample onto the middle of the window, making sure that the entire surface of the window is covered.
6. Place the second window into the holder.
7. Add the second 0.25mm PTFE spacer.
8. Carefully screw the hexagonal plastic holder into the above assembly.
9. Slide the holder plate into the beam path of the instrument and place the assembled cell on the two posts, ensuring that the stainless steel hexagonal holder faces toward the plate.

The cell is now ready for analysis.

***Cleaning and storing the cell***

Dismantle the cell and clean each part – with the exception of the windows – individually with an appropriate solvent. A final cleaning with chloroform or anhydrous isopropanol is suggested. Store the cell in a sealed container with a drying agent or desiccant.

Windows should be stored in accordance with their properties – hygroscopic materials must be kept in a completely dry atmosphere.