Rudolph Research Polarimeter Sample Cells

Rudolph Research Polarimeter Sample Cells are designed to be easily filled and cleaned.

When held at the correct angle and filled using the lower inlet port, the cell is filled with almost no possibility of leaving an air bubble in the cell. Filling from the lower inlet port forces any air bubbles up and out of the upper outlet port.

Rudolph cells are unlike other manufactures cells as they are uniquely designed to keep small air bubbles out of the

light path. Filling the cell is as simple as holding the cell at a slight upward angle and filling from the bottom inlet using a Luer Syringe. When the sample appears near the top outlet port, simply place the Luer cap on the upper port and then lower port. Your cell is now filled, capped and air bubble free. Cells must be clean and dry to ensure proper filling with minimum sample.

Rudolph Research Polarimeter Cell Fill Station™.

For users who prefer not to hold the cell while working with highly acidic or basic samples, the Rudolph Cell Fill Station[™] should be used.



By design, the Fill Station[™] will hold the cell at a suitable angle.



Make sure the cell is always clean and dry. Use compressed air and acetone for this process. Fill the cell from the lower inlet port with a Luer Syringe only. As the cell becomes filled and sample begins to appear at the upper inlet, cap off the upper then lower inlet port. Your cell is now filled and air bubble free.



Place a 2.5mm or 5.0mm bore Polarimeter cell into the Rudolph Fill StationTM.



The Fill Station[™] creates a light image that will go from darker to bright white circle when the cell is filled and air-bubble free. A bubble free cell shows a illuminated white circle as shown on the right.

into the lower inlet

port as seen here

Turn the Fill Station[™] light on. The light will turn off automatically after a few minutes.

Please Note:

Filling a Rudolph Polarimeter cell is easy and you can be assured of an air bubble free sample cell. It is important to note that when using highly acidic or basic solutions samples the cell should not be filled in the Polarimeter, doing so may allow spillage into the instrument which over time may damage the instrument.

The Rudolph Polarimeter Cell Fill Station[™] accessory is available for all Rudolph Autopol Polarimeters and included free of charge with Autopol V, Autopol V PLUS, and Autopol VI Polarimeter Models.

Sample will appear here in upper outlet port. The sample is injected with a Luer Syringe

20° to 30° Angle

Luer Screw Cap

Rudolph Research Analytical 55 Newburgh Road, Hackettstown, NJ 07840 USA • Phone: 973-584-1558 • Fax: 973-584-5440 • E-mail: info@rudolphresearch.com • Internet: www.rudolphresearch.com

Cleaning Instructions and Ordering Information

Use of Strong Acids or Bases:

If 1-6 Molar HCL is used please make sure your cell is made with Hastelloy indicated by a dash "H" at the end of the part number. In addition the Simplified Cleaning procedure should involve water and a base to neutralize the acid. Cleaning should be done twice to ensure all acid is neutralized. Advanced Cleaning should be done regularly.

Simplified Cleaning Procedure:

Step 1: Flush cell with solvent i.e., Acetone, Alcohol, DSMO or similar solvent through inlet or outlet port. Step 2: Dry with compressed air (nitrogen) through inlet or outlet port.

Advanced Cleaning Procedure:

Note: This cleaning method is only necessary when the simplified Cleaning Procedure still results in residue left by the solute. The frequency of this level of cleaning will be determined by each customer's unique application i.e., use of 1-6 HCl should result in daily or weekly advanced cleaning.

Step 1: Remove (4) screws at ends of tube using allen wrench provided.

Step 2: Disassembly cell ends

Step 3: Clean "wetted" pieces with Acetone, Alcohol, DSMO or similar solvent. Dry with lint free paper. Step 4: Reassemble cell ends and tighten screws with allen wrench provided.

