Prepare UHPLC/HPLC samples faster and minimize leachables with the new glass design

The Whatman™ Mini-UniPrep™ G2 Syringeless filter simplifies UHPLC/HPLC sample preparation over the traditional syringe filter method. The Mini-UniPrep G2 is an all-in-one integrated filter that replaces the syringe, syringe filter, glass vial, cap, and septum (see Fig. 1). After the filtration step Mini-UniPrep G2 can be placed directly into the autosampler in readiness for injecting sample into the UHPLC/HPLC instrument.

The Mini-UniPrep G2 includes an integral borosilicate glass vial housed within the plunger (see Fig. 2) and a borosilicate glass chamber for holding the unfiltered liquid. During the filtration step, the plunger is compressed into the glass chamber containing the unfiltered liquid. As the plunger travels downward, liquid flows through the filtration membrane to the top of the plunger and drops into the glass collection vial housed within the plunger (see Fig. 3). Therefore, the sample only contacts plastic for a very short period of time i.e. only while the plunger is being compressed through the unfiltered liquid. Once compressed, the Mini-UniPrep G2 is ready to be loaded directly on to the autosampler.

**Features of the Mini-UniPrep G2:**

- Consists of an integral borosilicate glass autosampler vial, plunger with attached filter membrane, and septum/cap
- Filters samples three times faster compared to the traditional syringe filter method
- Glass construction minimizes the risk of leachables contaminating the sample
- Designed to be loaded directly into the autosampler
- Includes visual indication that the sample has been filtered
- Minimizes instrument downtime due to unfiltered samples
- Wide range of membranes with 0.2 and 0.45 μl pore sizes to meet specific sample filtration requirements

Mini-UniPrep G2 comes in a number of configurations including slit septa for those autosamplers and robotic systems that require a slit septa. It is also available in amber for light sensitive samples. Amber Mini-UniPrep meets the requirements of the US Pharmacopeia (USP) and European Pharmacopeia (EP) for light transmission.
Fig. 3: How to use the Mini-UniPrep G2

Step 1
Insert a glass chamber into the hand compressor base.

Step 2
Dispense the sample into the glass chamber taking care not to overfill. The Mini-UniPrep G2 glass chamber has a maximum capacity of 500 μl indicated by a printed "Fill Line" on the glass chamber. Minimum sample volume that may be added to the glass chamber is 220 μl in order to collect 50 μl in glass insert.

Step 3
Place a plunger into the neck of the glass chamber. Do not attempt to depress the plunger further than the neck of the glass chamber.

Step 4
Place the hand compressor lid over the device such that the recess on its inner face fits over the septum cap of the plunger and the alignment guide is oriented with the slot in the base.

Step 5
Steady the hand compressor base with one hand on a flat surface whilst using the other hand to press down on the hand compressor lid until the plunger is fully depressed into the chamber.

Step 6
Lift the hand compressor lid from the base and remove the Mini-UniPrep G2.

Technical Specifications

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Once compressed, equivalent in size to 12 mm x 32 mm vial</th>
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</thead>
<tbody>
<tr>
<td>Filtering Capacity:</td>
<td>Chamber (Unfiltered Sample): 500 μl Inner Storage Vial (Filtered Sample): 330 μl Recommended Minimum Filtering Volume: 220 μl placed in the Chamber to obtain 50 μl in Inner Storage Vial</td>
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<tr>
<td>Nominal Force Needed to Compress</td>
<td>Approx. 25 lbs (11.3 Kg)</td>
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<tr>
<td>Autosampler Compatibility</td>
<td>Any autosampler that accommodates standard 12 mm x 32 mm profile vials (Needle height of the autosampler may need adjusting)</td>
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